Distributed Creativity: Filesharing and Produsage

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The culture of mashups which is examined by the contributions collected in this volume is a symptom of a wider paradigm shift in our engagement with information – a term which should be understood here in its broadest sense, ranging from factual material to creative works. It is a shift which has been a long time coming and has had many precedents, from the collage art of the Dadaists in the 1920s to the music mixtapes of the 70s and 80s, and finally to the explosion of mashup-style practices that was enabled by modern computing technologies.

To claim that there has been a rapid and unprecedented transformation during the past decades, from audiences as passive consumers of media to users as active content creators, is necessarily an oversimplification, then — and yet, the rhetoric emanating from the music and movie industries, amongst others which see their established positions threatened by the rise of user-generated content, seems to claim just that, and appears to harken back to some mythical good old days when audiences were still acting their part as "nothing more than a giant maw at the end of the mass media's long conveyor belt, the all-absorbing Yin to mass media's all-producing Yang", as Clay Shirky has so memorably put it (1999).

What has really happened is that the increasing availability of symmetrical media technologies – of networks like the Internet that afford their participants an equal chance to have their message heard – has simply amplified the existing cultural activities of independent fans and artists to an extent that they now stand side by side (and sometimes overshadow) the cultural output sanctioned by conventional publishers. Artful, clever, or simply funny mashups, news about which is spread by word of mouth, may now attract as much or even more attention as the original source material which they draw from, comment on, or send up. This is a trend that is by no means limited to artistic pursuits, of course – the rise of citizen journalism has been built on its ability on occasion to provide more insightful commentary and more fruitful discussion than conventional news publications (Bruns, 2005); open source software is seen to be more stable and reliable – and much cheaper – than many commercial products; the *Wikipedia* has become the world's preferred source for encyclopaedic information in less than a decade (Bruns, 2008). Each such case, and many beyond these iconic examples, has had its unheralded predecessors – pamphlet writers, amateur software authors, or independent enthusiasts for specific areas of knowledge – whom only a lack of appropriate technological support kept from achieving major recognition in their own right.

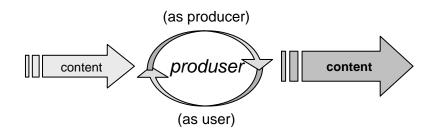
Most importantly, what technological support for such independent activities has enabled is that these activities need no longer take place in isolation, but can be aggregated – that groups of participants can pool their resources, coordinate their efforts, and develop central platforms from which their outcomes can be disseminated to the wider world. The availability of such technology, then – today in the shape of what we have come to describe as Web 2.0 and social media –, does not determine the success of such collaborative projects in achieving their aims, of course; for every Wikipedia there are a multitude of failed social media initiatives which for one reason or another did not manage to attract a committed and sizeable community of participants. Within the wider field of

online collaboration as well as in the specific area of creative mashup upon which this chapter will focus, there are a range of other, more important factors which influence the fate of such initiatives. However, these collaborative, communal projects can substantially *benefit* from utilising the available online technologies effectively.

Collaborative efforts to engage in creative, artistic mashups can be described as a form of distributed creativity: they are projects which harness the creativity of a large range of participants to build on and extend an existing pool of artistic materials. Such projects include *ccMixter*, the music sharing site operated by the Creative Commons group: here, individual musicians (more recently also including a few of the more progressive artists in the mainstream, from Nine Inch Nails to Radiohead) are able to upload their own recordings under an appropriate Creative Commons licence which allows other members of the community to build on their work by adding further instrumental or vocal tracks, remixing the material, or using it in other ways in their own compositions (Stone, 2009). The site provides the functionality to track such re-use, making it possible for users to trace the artistic genesis of the complete song from a single violin solo to a fully-featured ensemble piece, for example – performed and produced quite possible by musicians who have never met in person. Other projects explore similar opportunities for photos and videos, using sites such as *Flickr* and *YouTube* to coordinate the joint effort, or – like *Pool.org.au*, the usergenerated content site operated by the Australian public broadcaster ABC (ACID, 2009) – provide their own platforms for collaborative multimedia work.

Collaborative Mashups as Produsage

Such community efforts at collaborative content creation form part of the wider phenomenon of audiences becoming more *visibly* and more thoroughly active in creating and sharing their own content than ever before, as we have described it above. But for the most part, this is not just a case of more participants becoming active content producers in any conventional sense: many participants in such joint efforts are no more *producers* of the outcomes of such projects than the individual assembly line worker can be said to be the producer of the car that finally rolls off the production line. The contributor fixing a formatting error here of there in *Wikipedia* or the programmer tracking down an obscure bug in an open source package – and even the musician mixing together a number of separate tracks found on *ccMixter* – do not very well fit the conventional image of the content producer (or the artist) as an entity that exists in separation from distributor or consumer: rather, their acts of participation merely form part of an ongoing stream of content development and content improvement. They come to the collaborative space first and foremost as users, but it is also easy for them to become engaged in content creation; they occupy a hybrid position as user and producer at the same time – they are *produsers* (Bruns, 2008).



By extension, *produsage*, the collaborative, communal practice of content creation in which they engage, describes not a conventional production process that is orchestrated and coordinated from central office and proceeds in a more or less orderly fashion to its intended conclusion (the completion of the finished product), but instead constitutes an always ongoing, never finished process of content development and redevelopment which on occasion may fork to explore a number of different potential directions for further development at one and the same time: a continuous process of remixing and/or writing over what has come before, in pursuit of new possibilities, whose artefacts are digital objects that resemble medieval palimpsests – multi-layered texts that still bear the imprints of the generations of scribes whose successive efforts have led us to the current point. Open source works that way, as does the *Wikipedia* (whose edit histories chronicle every changed comma, every fixed typo) – but so do mashups: *YouTube*, for example, provides an excellent opportunity to trace the emergence and development of cultural memes from the initial, notorious video clip to a host of mashups, parodies, reinterpretations using Lego or in the style of *Star Wars*, and further (see e.g. Burgess & Green, 2009).

Through these and other leading examples, produsage is rapidly establishing itself as the standard mode of organisation for community-driven, collaborative content creation online; produsage communities are building significant new creative and informational resources and in doing so are beginning to challenge the established industries in their fields. Across their very different thematic preoccupations, these produsage efforts are predicated on a number of key universal principles:

Open participation, communal evaluation: produsage is based on the collaborative engagement of (ideally, large) communities of participants in a shared project. The community engages in a continuous peer review of all participants' contributions.

Fluid heterarchy, ad hoc *meritocracy:* members of a community of produsage participate as is appropriate to their personal skills, interests, and knowledges; such participation further changes as current points of focus for the produsage project change.

Unfinished artefacts, continuing process: content artefacts in produsage projects are continually under development, and therefore always unfinished; their development proceeds along evolutionary, iterative paths.

Common property, individual rewards: produsage adopts open source- or creative commons-based licence schemes which explicitly allow the unlimited use, development, and further alteration of each user's individual contribution to the communal project.

These principles can be observed in a wide range of produsage projects and environments, and it is those environments which adhere most closely to these foundational principles which tend to be most successful in the long term (Bruns, 2008).

In our reading of mashup culture as a form of produsage, then, it is the last of these principles which turns out to be most problematic. The very idea of the mashup implies the existence of prior content to be remixed and remade — and while communities such as *ccMixter* and *ABC Pool* have gone to great lengths to track the provenance of their materials and ensure that only appropriately licenced source materials are incorporated into their own efforts (in this they closely follow the example of

open source software, whose very continued existence depends on averting any potential threat of legal action over copyright or patent infringements), the same cannot be said even with remotely comparable certainty about other mashup initiatives. Far from it, indeed: perhaps the majority of mashups, from political parodies that remix news footage to musical styles that are predicated on the use of sampled sounds, depend on source materials of dubious legal status.

The arguments surrounding such mashups are well-rehearsed and need not be repeated in any detail here: those defending mashups in the debate cite 'fair use' provisions (especially for satirical uses) that continue to exist as copyright exceptions in the intellectual property rights legislation in various countries, point to the often minute nature of the seconds-long musical samples used in hiphop and other musical styles, or highlight the inherent artistic and cultural value of the new works which are created in the process; those taking the opposite view express their right to protect themselves against what they perceive as copyright violations, and often seek to further limit 'fair use' exceptions.

A major *cause celèbre* in this context is DJ Danger Mouse's *Grey Album*, which mashed up the album *The Beatles* (colloquially known as *The White Album*) and rapper Jay-Z's *Black Album* to create a new work in its own right, but without explicit permission from either of the original copyright holders (Lessig, 2004). The case, which has received substantial scholarly attention, demonstrates both the significant creative potential inherent in mashup approaches and the difficult legal questions which they raise. Importantly, many copyright scholars have used it to highlight not current legal practice surrounding copyright cases, but the original intent of the law, which aimed to balance the rights of the copyright holder to profit from their work with the rights of users – that is, to build and improve upon existing material and thereby contribute to further innovation. This copy*right* aspect of copyright legislation has been gradually backgrounded over past decades, in parallel with the rise to greater economic prominence of the copyright industries (Lessig, 2008).

Distributing Creative Works

Alongside other fundamental limitations in the existing conventional mechanisms for distributing creative works in physical or electronic form, it has been this perception of a profound and worsening imbalance between the two purposes of copyright legislation that has contributed substantially to the development of alternative distribution networks outside the control of the content industries. Such networks chiefly include the filesharing networks from *Napster* to *Soulseek* and the various Bittorrent-based systems, as well as torrent search sites such as *Pirate Bay* and *Dimeadozen*.

In fact, such networks can themselves be understood from the perspective of produsage: what has been prodused here, through the collaborative efforts of many thousands of participants, are the very means of distribution for creative content themselves (for music and other audiovisual materials, but also for digital content in many other forms). Here, too, the core principles of produsage can be observed: the networks are open to participation by anyone with the necessary client software, and are designed to be more efficient at distributing content the more clients are connected and help share content; the torrent search sites play home to a community of sharers that is engaged in a continuous process of peer evaluation which assesses the quality of the shared content and the availability of sharers, values active sharers and and ostracises mere leechers (users

who download but do not share in turn). From out of this continuing process arises a strong sense of a nonetheless fluid and changeable community comprising of leading filesharers, worthy contributors who may not add much new content but ensure that the shared materials continue to be available, and marginalised freeloaders. Additionally, the network structure is constantly changing, and never complete, as users connect and disconnect; (for the same reasons) it is a virtual, communal network, owned by nobody and superimposed onto the physical infrastructure of the Internet.

To describe filesharing in this fashion does not intend to glorify the practice – but neither does it aim to vilify it by claiming (as the music and movie industries are wont to do) that all filesharing is 'piracy'. For better or for worse, what has emerged here is a stable and sustainable distribution network for digital contents, built through produsage, and it is the properties that this network and this practice have inherited from their origins in produsage which have made it so difficult for affected industries to successfully combat filesharing. In stark contrast to the first-generation filesharing system *Napster*, modern filesharing networks are flat and fluid, and there is no central controlling authority which may be eliminated using legal or technical means; even well-known support sites such as *The Pirate Bay*, subject of a protracted law suit in its native Sweden (Masnick, 2009a), ultimately remain ancillary to the networks and the practices of filesharing themselves – *Pirate Bay*'s potential disappearance may temporarily frustrate filesharers, but replacement sites will quickly reappear in another location.

Whether it disseminates legal or illegal content at any one point, in other words, the overall practice of filesharing as a means of distributing digital content has now established itself alongside the distribution networks of the mainstream copyright industries much in the same way that the practice of citizen journalism or the practice of open source software development have emerged to compete with the conventional industries in their fields. These new practices cannot be undermined by anything but prohibitively massive legal action, since they exist in the highly decentralised, non-hierarchical structure that is most suited to produsage processes, and they cannot be curtailed by hiding more and more of the commercially-produced content with which they engage behind intrusive technological protection measures (such as content paywalls for journalistic material, or copy protection mechanisms for CDs and DVDs) without also causing substantial annoyance to customers and thus making filesharing an even more convenient alternative source for the content. By contrast, what filesharing – and many other produsage-based sources of content – *are* vulnerable to is competition on the basis of quality and convenience, at an appropriate pricing level: this is the lesson from Apple's introduction of *iTunes* as a moderately priced, convenient source of audiovisual content with relatively few limitations.

Of course, 'filesharing' is an unfortunately vague term, due not least to the efforts of those who seek to undermine the practice and simply decry all filesharers as 'pirates' – and even suggest that "piracy is being used to fund terrorist groups" (Duff & Browne, 2009). By contrast, the reality is that the filesharing networks which exist today – the majority of which are built on the decentralised Bittorrent technology – simply constitute a collaboratively prodused and maintained technology for the safe and speedy transmission of structured data. They are no more predestined to be used for 'piracy' (whatever that term may mean) than cars are designed to be used for the transport of stolen goods. Indeed, it is important here also to highlight some of the perfectly legal and legitimate uses of filesharing technology – so, for example, Bittorrent networks are used to make available the sizeable

software installation packages for the freely available open source operating system Linux in its many flavours, and even a number of commercial music labels (such as DGMLive, which we will return to later in this article) utilise Bittorrent as a delivery technology for music recordings once the music has been legitimately purchased by customers in their online stores. It is worth noting in this regard: any heavy-handed legal intervention to shut down filesharing networks altogether, by blocking the TCP/IP transmission ports they use or by introducing draconian 'three strikes' laws against Internet users who have been found to be running filesharing software, would also undermine such entirely legal uses, and would break the business model which such legitimate services rely on.

Even where copyrighted materials – chiefly, music and movies – are shared across the network without permission by their copyright holders, the designation of all such practices as 'piracy' should be questioned. In spite of over a decade of highly publicised lamentations by the music and movie industries that such 'piracy' is diminishing their profits, or even 'killing the business', there appears to be precious little reliable evidence linking filesharing and a decline in revenue. While the music and movie industries regularly make claims of crisis and of revenue losses in the billions, they have consistently failed to produce independently verifiable evidence to support such claims; by contrast, independent research finds that overall music revenues have continued to grow even in spite of filesharing or external financial crises (Masnick, 2009b). Additionally, quite to the contrary of industry rhetoric, research also suggests that it is exactly those who are most engaged in filesharing who are also the music industry's most loyal customers (Shields, 2009).

At least for these lead users of music filesharing networks, then, the appropriate 'piracy' analogy is not with the buccaneers of old, robbing innocent traders of their goods to make a quick profit: instead, it lies rather closer to home. The piracy which we encounter here is merely a modern-day equivalent of the pirate radio ships moored just outside British waters in the 1960s, set up to circumvent extant popular music broadcasting restrictions and deliver rock music to the unserved majority audience. At that time, the music industry not only turned a blind eye to such piracy (that is, to broadcasters acting outside applicable legal frameworks), but actively supported it, as the pirate broadcasts substantially boosted its sales potentials.

It is time for the industry to stop believing its fulsome rhetoric, then, and to come to terms with the possibility that music filesharing today may well serve a similar role of providing users with an opportunity to try new music before committing to the CD purchase or *iTunes* download. This is not to argue that *all* music downloaded from filesharing networks will be bought 'properly' by its listeners in the end – no more so than any song listened to on the radio or received from a friend on a mixtape was ever purchased by all of its listeners. However, here as much as in these non-digital precedents for music sharing, the music industry's overly simplistic calculation that every song downloaded from a filesharing network equates to a loss of revenue simply cannot be upheld with any seriousness.

The Ethos of Music Filesharing

In combatting the tired and unsubstantiated stereotype of all filesharers as pirates of the pillaging and plundering variety, then, it is also necessary to distinguish between a number of different groups of music filesharers, and between the types of content which they share. The distribution of

new music close to or even before the official release date makes up for only part of the overall activity in filesharing networks, after all — and motivations for participation here may vary from a very strongly held enthusiasm in fans who absolutely must hear their favourite band's latest work immediately, but remain highly likely to purchase the CD or DVD as soon as they can afford to (these are the same fans who are also catered to by studio outtakes and bonus tracks) to much more casual listeners who wish to explore highly hyped bands without purchasing their music outright (and whose access to music via filesharing is thus no different to taping a song off the radio — neither constitutes a lost sale to the music publisher).

But beyond this lies a very different network of music filesharers: a network of fans and communities who have made it their goal to ensure that their favourite musicians' unreleased and bootleg recordings remain in circulation and are available in the best possible condition. Away from the generic Bittorrent tracker sites like *Pirate Bay* and *Torrent Reactor*, such communities have built their spaces in sites such as *Traders' Den* and *Dimeadozen*, as well as in torrent tracker sites dedicated to specific bands or musical styles. Many such communities have established a surprisingly strict set of rules for participation; such rules commonly include provisions against mere 'leechers' who do not contribute to the sharing process, requirements to remove any officially available material from the bootlegs which are shared in the community, and prohibitions against any commercial exploitation of the shared materials.

Many of these communities, in fact, have grown out of pre-Internet trading communities which operated through elaborate 'tape trees' –bootleg audiotape trading networks which were structured so as to minimise the inevitable loss of fidelity as tapes were copied from one participant to the next –, and many also share these earlier communities' ethos of beating the commercial 'grey label' publishers of unauthorised bootleg recordings, which often exploited enthusiasts by charging massively inflated prices for their tapes and CDs, at their own game. (Indeed, some recordings shared in these communities are described as 'liberated boots' – liberated, that is, not from the artist who performed on them, but from the grey label which attempted to make money from them.)

What emerges even from this brief description of such bootleg sharing communities, then, is evidence of a relatively complex ethical framework. Participants have no compunctions about sharing otherwise unreleased bootleg recordings, and clearly do not feel that their doing so undermines the professional prospects of the artist or their label, but take great care not to share any officially, legitimately released music (to the point of removing individual commercially released live tracks from the full concert bootlegs which are shared in the community); they take pride, by contrast, in undermining the business of dedicated grey labels, which are seen as parasites attempting to feed on the bootleg community. Indeed, in stark contrast to standard music industry rhetoric, too, many such sites see themselves as doing a service to the artists they follow, by showcasing the quality of their live performances, spreading the word about upcoming gigs and new releases, and saving fans from spending money on grey label bootlegs that could better be used on purchasing legitimate releases.

Some bootleg sharer community sites even offer an opt-out facility for artists who do not wish to see their music shared this way (and by and large, such wishes appear to be respected). Addressing

artists and the music industry directly, for example, the *Dimeadozen* Web page footer provides useful insight into the mindset of the community (*Dimeadozen*, 2009):

If you're an artist (or a legal representative of an artist or its estate) and you don't want your ROIOs [recordings of indeterminate origins – a community term for 'bootleg'] shared on DIME for free among your fans, you may opt out any time by sending e-mail to the site admin. We will then put you in our list of not allowed artists, known as the NAB list. This will halt all sharing of your ROIOs using DIME's trackers within minutes.

BTW, the ROIOs exist, you can't make them vanish. So, why not let your fans get them for free from one another instead of having to purchase them from commercial bootleggers on auction sites?

On the basis of the evidence available from these sites, it appears necessary to rehabilitate at least a substantial portion of those Internet users engaged in filesharing. Undoubtedly, there are a significant number of filesharers who use Bittorrent networks simply to access the latest software, movies, and music without paying – but whether they constitute the majority of users, and whether their activities have a measurable impact on the fortunes of the industries which they are said to affect, still remains to be independently documented. By contrast, at any rate, the users participating in the bootleg sharing communities which we have encountered here are no pirates, and certainly no terrorists: instead, they care deeply about the music they share, go to great pains only to work with materials which are not officially available, and their participation is driven by loyalty and enthusiasm for the artists whose bootlegs they share, rather than by a desire to harm them.

This enthusiasm, indeed, is also documented by the material which they share. Bootlegs shared with the help of sites such as *Dimeadozen* range from raw recordings, uploaded only days after a recent concert, to digitised decades-old archival tapes which were only just rediscovered in someone's attic or basement; in many cases groups of committed users will use such recordings as the source material for a major restoration or remastering project that aims to substantially improve the audio quality of the bootleg. Depending on availability, such restoration projects will combine (in other words, mash up) a number of alternative sources and/or sync audio recordings with related film or video footage; many also add ready-to-print CD or DVD cover graphics which are delivered alongside the completed bootleg. What emerges in the end necessarily depends on the quality of the original sources, but it is not unusual for these restored recordings to match or compare favourably with the official live releases of the artist.

To highlight just one recent example: on 10 December 2007, the remaining members of Led Zeppelin, joined by the late John Bonham's son Jason, reunited to perform a much-anticipated one-off tribute concert for Ahmet Ertegün, co-founded of Atlantic Records, who had died one year earlier. In spite of the enormous fan interest in the concert, to date, no official CD or DVD recording has been released. What does exist, however, are painstakingly mixed audio and video bootlegs of the event which remain freely available through bootleg filesharing networks, compiled from individual recordings shared in the weeks following the concert through *Dimeadozen* and other sites. There can be little doubt that even in spite of the availability of this bootleg, an official CD or DVD release of the concert would still be a massive sales success, even with those filesharers who have

already downloaded the bootleg; in accordance with the bootleg community's own rules, the bootleg would also be removed from the network as the official release became available.

What the filesharers engaged in this and similar compilation projects are doing is far from an act of piracy as the term is commonly understood – rather, they perform a service to the music and the artists they love (even if some of these artists themselves may disagree), and to their fellow fans. They do so not to profit monetarily from their work, but to show their commitment as fans. In truth, the core of our argument here should be less about the immediate industrial and commercial aspects of bootlegs such as these, and more about the broader cultural dimension: whether we are concerned with the Led Zeppelin reunion or another concert of note, from a longer-term perspective these performances *deserve* to be preserved for posterity, and to date it has been bootleg filesharers, not the music industry, who have ensured that they are. Global culture would be poorer without the many illegitimate bootlegs that have document the development of blues, jazz, and rock, and it *is* poorer for the many other recordings which have been lost through poor storage and lack of dissemination – bootleg filesharing communities ensure that the remaining recordings, and those of the new artists and styles yet to emerge, need never suffer the same fate.

Produsage as Curation

In this collective effort to preserve culture, then, we can once again see produsage-based mashup processes at work: leaving aside the dubious provenance of the source materials, the restoration, recombination, remixing and remastering of a clutch of audio recordings by a community of music enthusiasts clearly follows the iterative and palimpsestic processes which we have outlined before, and its outcomes remain unfinished artefacts which may change yet further if additional alternative source recordings become available and are added into the mix. Additionally, at a higher level, the participants involved in both restoring and sharing these recordings engage in a form of content curation which is similarly orchestrated through community-based produsage: not unlike museum and archive curators are charged with preserving the cultural record for their field of interest, the participants in this form of bootleg filesharing collaborate on compiling a comprehensive archive of bootleg recordings from throughout an artist's career, on ensuring that these materials are available in the best fidelity achievable, and on safeguarding their continued circulation within the filesharing network.

In the absence of any other cultural institution which was able and available to do so, in other words, these bootleg filesharers have now become the curators of 'their' artist's live œuvre. Through their work, musicians, fans, and researchers who seek to track the artistic development of a particular performer through their live performances stand a better chance of doing so by accessing these bootlegs through filesharing networks than by going to any other source, and this, not the dubious and highly disputable sale price which the industry may wish to attach to such recordings for the purpose of tallying its supposed losses from 'piracy', constitute the real value of these fancurated bootleg collections, and of the enthusiast-driven produsage and mashup efforts which have helped to create them.

What emerges here, in fact, is a division of labour which in reality has been long in place already, but which the music industry continues to pretend does not exist: limited as it is by its need to pursue the next breakthrough artist, and to publish the latest releases, the industry's maintenance of back

catalogues and live releases has long been neglected except where a substantial continuing revenue stream could be guaranteed. Many studio as well as live recordings of substantial cultural significance have fallen out of circulation as a result, and are rescued from this limbo – if at all – only through the efforts of niche labels which engage in music publishing out of an enthusiasm for the music more so than in hopes of making significant profit, or through the efforts of fans and bootleg sharers who circulate copies of these legacy recordings through other means (and today not least through filesharing networks).

The mainstream industry continues to persecute these alternative means of sharing the music, and to frustrate the efforts of many niche labels to re-release out-of-print recordings, but very clearly does not show an interest in its own right to keep these recordings in circulation – ultimately, this deprives audiences around the world of a major portion of their recorded cultural heritage. As we have seen, filesharers have already pushed ahead in wresting control over this heritage away from the music industry, if in dubious legal circumstances – perhaps it is now time to push for a greater legal recognition of the rights of audiences to their cultural heritage, even where this happens to the detriment of the music industry. In lamenting the power of the journalism industry over what is reported in the news, the journalism scholar Herbert Gans once suggested that "the news may be too important to leave to the journalists alone" (1980: 322) – and this realisation, shared by many, was a significant contributor to the rise of citizen journalism as a produsage-based alternative to the mainstream media. By analogy, perhaps we should now assert that in light of the important role which is played by music in our cultural lives and heritage, music, too, is too important to be left to the music industry alone.

Towards a Pro-Am Model of Music Curation and Distribution

Although the conflict between professionals and amateurs has by no means been solved yet in journalism, it is nonetheless possible to identify a number of models through which professional news *producers* and citizen journalist news *produsers* are beginning to find common ground and arrange themselves in cooperative Pro-Am frameworks (Leadbeater & Miller 2004; Bruns, 2010). In such models, both sides contribute what they do best – professional journalists, for example, tend to be able to use their institutional backing to gain better access to sources and engage in longer-term investigative research, while citizen journalists provide a wider range of perspectives and a deeper communal memory that can be brought to bear to analyse, evaluate, and comment on current affairs.

If the current deep misgivings between music industry and music fans, fuelled by heated rhetoric on both sides, can be overcome, then here, too, more fruitful and mutually beneficial arrangements are possible; in some niche spaces within the industry, they are already becoming visible. It appears obvious that the mainstream music industry will for now remain better able to support musical talent, fund new studio recordings and live tours, and promote them through advertising; at the same time, it is also evident that the community of music enthusiasts is better able to keep alive the excitement around established artists and to curate the back catalogue and live archive.

Additionally, the fan community has also been able to develop filesharing into a viable alternative distribution network for digital content – a network which remains open for both enthusiast and industry use.

Any Pro-Am approach explored in the music industry would need to take into account these fundamental observations, and build its business models upon them. Some early steps towards this are already evident; some have been in place for some time by now: as early as 1991, for example, Frank Zappa officially released a hitherto illegitimately circulated, fan-curated collection of live recordings in his "Beat the Boots" CD series; more recently, and though deeply critical of the practice of bootlegging itself as a disruption of the live experience, Robert Fripp's DGMLive label has begun not only to utilise existing fan bootlegs of King Crimson shows for its live releases, but also to use Bittorrent networks to deliver these recordings as (paid) downloads to its customers. Rather than condemning bootleg filesharer communities outright and seeking to criminalise their behaviour through the sponsoring of further legislation, thus, legitimate artists and their labels could well find it more fruitful to track the collaborative efforts of their fans as they curate the communal archive of live recordings, and to pick out the best and most-shared of these recordings for official release on CD.

In turn, this requires the music industry to at least partially release its hold on recordings which it has no intention to utilise in any substantial way. Again, a number of bands and artists have already declared themselves to be 'taper-friendly', even to the point of reserving special areas in the live venues where they play for audience members wishing to make an audio or even video recording of the concert they have come to see; the dissemination of such recordings through filesharing networks is accepted at least tacitly in such arrangements, and participating artists tend to point to the valuable word-of-mouth advertising benefits which they derive from allowing their shows to be bootlegged. On the available evidence, the creation of a comprehensive fan-curated live archive for each tour with follows from this practice does not appear to undermine the sales potential of any subsequent official tour CD or DVD – indeed, the ability for fans to preview through bootlegs the kind of performance that may be documented on the official release may boost rather than reduce sales.

Beyond this, there is a real potential that fan curation could also be harnessed for the maintenance of artists' back catalogues – and if niche labels which engage in similar practices are included here, to some extent it already is. Rather than attempting for themselves to maintain the recordings archive of long-established archives, often with results that are as frustrating for the label as they are for the community of listeners, major labels could work with the leaders of the fan community to make such legacy recordings available at reduced prices through filesharing networks, and could empower reliable community members to engage in remastering, remixing, even mashup activities as they see fit. At the very least, this would keep the back catalogue in circulation and fans satisfied; it may also lead to renewed interest in such legacy recordings if they lead to notable new uses for this existing material.

Such developments may appear unlikely in the present circumstances, at a time when major labels are struggling with substantial financial problems – which, it should be noted, have much more to do with inept management and endemic corruption in an industry that is "founded on exploitation, oiled by deceit, riven with theft and fuelled by greed", as Robert Fripp has put it (1997), than with the impact of filesharing. However, the likely eventual collapse of the mainstream music industry model as we know it also holds within it a substantial opportunity for real change that may deliver a new and more sustainable arrangement between fans, artists, and labels than has existed for a very long time. It appears to be high time to mash up the music industry.

References

- Australasian CRC for Interaction Design (ACID). (2009) *Pool User Research*. http://pool.acid.net.au/wp-content/uploads/2009/08/pool-interim-report-may-2009.pdf
- Bruns, Axel. (2005) Gatewatching: Collaborative Online News Production. New York: Peter Lang.
- ———. (2008) *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang.
- ———. (2010) "News Produsage in a Pro-Am Mediasphere." In *News Online: Transformations and Continuities*, eds. Graham Meikle & Guy Redden. London: Palgrave.
- Burgess, Jean, and Joshua Green. (2009) YouTube: Online Video and Participatory Culture. London: Polity.
- Dimeadozen. (2009) http://www.dimeadozen.org/
- Duff, Eamonn, and Rachel Browne. (2009) "Movie Pirates Funding Terrorists." *Sydney Morning Herald* 28 June 2009. http://www.smh.com.au/national/movie-pirates-funding-terrorists-20090627-d0gm.html
- Fripp, Robert. (1997) "DGM's Founding Aims and Mission Statement." *DGMLive*. http://www.dgmlive.com/about.htm
- Gans, Herbert J. (1980) *Deciding What's News: A Study of CBS* Evening News, NBC Nightly News, Newsweek, and Time. New York: Vintage.
- Leadbeater, Charles, and Paul Miller. (2004) *The Pro-Am Revolution: How Enthusiasts Are Changing Our Economy and Society*. London: Demos. http://www.demos.co.uk/publications/proameconomy/
- Lessig, Lawrence. (2004). "The Black and White about Grey Tuesday." *Lessig 2.0*, 24 Feb. 2004. http://lessig.org/blog/2004/02/the_black_and_white_about_grey.html
- ———. (2008) Remix: Making Art and Commerce Thrive in the Hybrid Economy. London: Bloomsbury.
- Masnick, Mike. (2009a) "Pirate Bay Loses a Lawsuit; Entertainment Industry Loses an Opportunity." *Techdirt* 17 Apr. 2009. http://www.techdirt.com/articles/20090417/0129274535.shtml
- ——. (2009b) "Mainstream Press Waking Up to the News That Musicians Are Making More Money." *Techdirt* 16 Nov. 2009. http://techdirt.com/articles/20091114/1835036932.shtml
- Shields, Rachel. (2009) "Illegal Downloaders 'Spend the Most on Music', Says Poll." *The Independent* 1 Nov. 2009. http://www.independent.co.uk/news/uk/crime/illegal-downloaders-spend-the-most-on-music-says-poll-1812776.html
- Shirky, Clay. "RIP the Consumer, 1900-1999". Clay Shirky's Writings about the Internet: Economics & Culture, Media & Community, Open Source 1999. 24 Feb 2007.

 http://www.shirky.com/writings/consumer.html.
- Stone, Victor. (2009) *ccMixter: A Memoir, or How I Learned to Stop Worrying about the RIAA and Love the Unexpected Collaborations of Distributed Creativity During the First Four Years of Running ccMixter.* http://fourstones.net/ccMixter_A_Memoir.pdf.