Where the 'Hyper Local' and 'Hyper Global' Meet:
Case Study of Indymedia Radio

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Abstract
This paper focuses on the radio projects of Indymedia discussing the forms of network building among alternative media producers via free and open source content sharing online, the relationship between the social organising taking place and the available technologies, as well as the emergence of 'hyper global' and 'hyper local' spaces facilitated through radio production. This paper also seeks to open up debates around these topics and add to research seeking to include radio production and organising into the discussion of new technologies and alternative media.

> *'Some people want to build counter institutions, some just want to play their music'* (Toft 2003, personal interview)

Introduction
This paper seeks to explore alternative media and new technology through a focussed examination of audio programming within the alternative media network Indymedia. Within the global and local Indymedia networks, a tremendous output of radio is being produced as a form of alternative news and entertainment in neighbourhoods on the FM band and online for a global audience. These Indymedia radio producers are part of a growing network of independent media makers, but more specifically, they are part of a growing network of independent audio producers through which new means of sharing content and streaming have been developed.

This paper itself is based on a chapter from my current PhD research, which is an examination of various models of community radio. Research was conducted primarily via interviews with practitioners and through my own experience as a

participant with Indymedia and a number of audio collectives. It aims to engage with emerging tensions around alternative audio production, the interplay between local and global networks and content, both online and offline, and the convergence of digital and analogue technologies. It is a work in progress and seeks to open up debates around these topics and add to research seeking to include radio production and organising into the discussion of new technologies and alternative media. This paper is not, however, an analysis of the Indymedia network. Since 2002, there has been a worthwhile explosion of articles and chapters written about the Indymedia phenomenon that offer extensive analysis of the network, its structure, philosophy, technology and history (Atton 2004; Downing 2001b; Kidd 2002, 2003; Couldry 2004; Coyer 2005; Halleck 2002, 2003; Schumway 2001; and Meikle 2002). This paper is an examination of particular forms of alternative radio whereby Indymedia is the example under the microscope.

The political impetus for this project emerges out of both the global movement around independent media and the nationally situated movements in both the U.S. and U.K. for the expansion of low power community radio and their connection to broader concerns in support of media democracy. Theoretically, it also emerges from the literature around 'people-powered' independent media, called alternative media (Atton 2002; Couldry and Curran 2003), radical media (Downing 2001b) and citizen's media (Rodriguez 2001). Here, I chose to use the term 'alternative media' without properly engaging in the thoughtful debates and distinctions around such language. By 'alternative' in this context, I mean projects that aim explicitly to challenge the sites of concentrated media power (Couldry and Curran 2003) and projects that counter the dominant and expected ways of making media, be it political speech or fan-based music (Atton 2004).

Digitopia in an Analogue World or 'Anatopia' in a Digital World?

The experimental nature of content and production among alternative projects online necessitate a non-essentialist view of the Internet, arguing that these projects 'invite us to consider the Internet as existing in a complex of features and pressures which are at once technological, historical, social, cultural, economic and political' (Atton 2004, 1). Such a holistic view also helps us avoid a techno-romantic seduction of the Internet as either wholly new or wholly discreet from existing structures and impulses (Ibid). Howard Rheingold asks us to think about how we would use our tools differently if community came first (Rheingold 2001). The relationship between technology and social change is thus one in which new technologies make possible certain kinds of communication but it is the impulse and motivation for such uses where social change occurs. Technological

determinism is identified as a negative impulse for its overly simplistic causal relationship between technology and change, but this is not to dismiss the value of analysis that accounts for the complexity and negotiation taking place between technical possibilities and social needs (Dubber 2005). Citing McLuhan and Zingrone (1995), Dubber argues: 'In other words, "We shape our tools and they, in turn, shape us"' (Ibid, 9). While there exists a push and pull between social needs and technological possibilities, it is the motivation and agency of the actors involved that tells a richer story of the uses and interactions between the why and the how.

This is a study about alternative media and the Internet, but it is also a study of radio. How we rethink radio in the digital age is also about both technology and structure. New technologies have expanded the capacity for individual action, made it possible for the individual enthusiast in their bedroom to programme their own Internet radio station or 'podcast'. Previously, broadcasting required some kind of social infrastructure to support even the actual production of radio or television. Despite the technical capacity for individualised projects, people are nevertheless engaged in devising ways to make broadcasting collective. While Internet radio transforms public access to information and entertainment, the technology alone does not address the social or political reasons why people might wish to make their own media in the first place. In other words, the desire to organise as a collective, to create a community media project, transcends the technological means of distribution and production. The potential for endless possibilities within the digital arena cannot serve as a panacea to the issue of scarcity on the traditional dial.

The traditional analogue broadcasting bandwidth is regulated because of scarcity, because governments have allocated only a certain amount of frequency for radio and television. This paradigm of scarcity is transformed in the digital arena and especially online. Internet broadcasting is one venue available to gain access to the otherwise limited analogue broadcast spectrum. On one hand, the limitless space available to broadcast on-line addresses the problem of scarcity and there certainly is room for everyone who has something to say or a record to spin. But there are inherent limitations to the prospects and hype surrounding Internet radio at present. Though Internet broadcasting offers many useful avenues, its limitations include the technical (the digital divide and insufficient band-width for quality transmission among those with dial-up phone connections) and the social (community access and the inherently more intimate format traditional radio offers).

To distinguish along technological lines between analogue and digital radio is also complicated because the technologies utilised co-exist across mediums. At the

same time technology has opened up new avenues for broadcast communication, what kind of media landscape we wish to see in the digital world has to be envisioned with values not defined by their medium, but by a vision transcendent of the precise means of delivery, production and reception. Online spaces have a unique and often reinforcing relationship to traditional broadcast spaces. Most analogue radio broadcasters simulcast online or make content available as downloads or 'podcasts'. Again, taking a technology first approach to the digital world of radio fails to address the reason why people come to engage in the production of such projects as well as new avenues of distribution that have emerged between the online and analogue realms.

But, as the question is being asked, will podcasting kill the radio star? (Berry 2005). The phenomenon has already affected numerous changes in the commercial radio landscape in the US. Stations like *Indie 103* (Los Angeles) and *The End* (Seattle) are commercially owned stations seeking to emulate a looser and more free-form feel to their programming and style more reminiscent of 1970's FM rock radio than typical mainstream, chart-driven formulas. Last month, an Infinity Broadcasting AM station in San Francisco switched to an 'all-podcasting' format whereby the station broadcasts material submitted to the station by amateur and semi-professional podcasters. Despite the market cynicism inherent in such a blatant attempt to co-op an alternative style for commercial ends, it is nevertheless a clear sign of the influence of podcasting and the frustration with most radio du jour.

There is a deep irony that incumbent radio broadcasters are responding to commercial pressures by taking on a model of broadcasting already established practice among independent outlets and reminiscent of the earliest of days of broadcasting. How this changes the way we listen to radio is also a piece of the transformation. Clearly, there is a shift from the smooth and flawless and formulaic style of presentation and limited playlist model that proliferated over the past fifteen years. But is podcasting a move away from the local and towards a hyper-personality driven style? Because of copyright law, podcasting is largely an all-speech style of radio, except for the large media players like Infinity and Sirrus who can afford to pay royalty fees for their broadcast experiment. It also does not address the continuing lure of pirate radio both in the UK and US. In the UK, many pirates operate as profit-driven music stations and serve as an underground economy linked with club culture. Though there continue to exist community-based pirates, they are not often referred to anymore as the focus shifts towards the new tier of community stations. In the US, there have been a number of collectively-minded pirates drawing media attention. Radio Free Brattleboro in Vermont fought their impending FCC closure with widespread support including that of the city council and the Democratic Senator Patrick Leahy, himself a co-

sponsor of legislation to expand low power radio brought on board in part because of pressure from the Brattleboro community.

The earliest wave of Internet radio listening emerged as a response to the constricted playlists and homogenised output of commercial radio. Online radio offered diverse and varied listening possibilities for musical tastes not catered to on the FM dial. On the other hand, this 'narrow' listening only furthers forms of hyper-individualism. A sentiment expressed thus: 'If I'm going to listen to a piped-in newscaster sitting in some bunker in Pennsylvania, I may as well hire my own.' On the other hand, Internet broadcasting offers a further redefinition of 'community,' away from geographical limitations and across transnational boundaries. A case study of the radio projects emerging from the Indymedia network demonstrate the complex and interconnected relationship between global and local broadcast spaces that, while dependent on technology to achieve, exists as well because of the social organising needs and interests of the people producing and listening to such programming.

The Indymedia Network
A few brief words on Indymedia are necessary as background. Indymedia is both a global online network (www.indymedia.org) and over 140 (at the time of writing) local, autonomous Indymedia organisations around the world offering 'grassroots, non-corporate coverage' of major protests and issues relevant to the anti-capitalist, peace and social justice movements. Local Indymedia centres can be found across Europe, including the UK, as well as Israel, Palestine, South Africa, Indonesia, Nigeria, Australia, Russia, Brazil, Cyprus, Croatia, India and Colombia. Over one third of the IMCs (Independent Media Centres) are located in the U.S. and Canada. Indymedia has effectively established a model that has been replicated many times around the globe by media activists who want to cover their own local demonstrations and issues, and serves as a means to create media centres to cover large-scale global protests, such as the forthcoming space in July of 2005 when Indymedia will provide a temporary multi-media facility for independent media makers during the G8 meetings and protests in Scotland.

Born out of the need to provide a space for alternative voices and independent journalists during the massive anti-WTO demonstrations in 1999 in Seattle, Indymedia has continued to grow exponentially since, both in size and scope. And in Britain, the roots of Indymedia UK can be found in the organising around the Carnival Against Capitalism in June, 1999. One London-based activist sums up the Indymedia sensibility this way: 'It is impossible to calculate how many people are involved, as participation in the volunteer-run group runs the gamut from those who work full-time to keep the infrastructure running, to those who post a single

story during a specific event. The IMC has no world headquarters, but if it can be said to be located anywhere, that location is at the convergence of several critical trends: the rebirth of activism, the maturation of the Internet and the crystalization of what participants see as a new evil in the form of out-of-control corporatism' (Covell, as quoted in Notes from Nowhere, 2003). Indymedia itself is a project based on the philosophy that the structure of an organisation must represent its values. Thus, one of the key features of both the Indymedia site and its philosophy is that of open publishing, whereby 'open publishing means the process of creating news is transparent to the readers'.[1] This means that anyone can post a print article, photo, video or audio piece directly onto the website under the 'newswire' section.

Multi-media content is produced primarily for an on-line audience, and the sites are open for anyone to publish. In short, the Indymedia project and its collaborative radio efforts are about collective responses to technological and social needs. In addition to the online presence, local Indymedia networks have regular meetings and working groups and produce their own websites focussed on local and regional content, in addition to being apart of the grassroots activist movement in their locales. Though much has been written about the Indymedia network, little has focussed explicitly on the impact and organising structure of the radio projects, which have emerged as a vibrant component of the Indymedia phenomenon.

Indymedia Radio and Content Sharing

The Indymedia radio project operates on both a global and local levels, each reinforcing the other, both in terms of production and reception. In terms of radio broadcasting, there exists a global radio stream broadcasting local content from around the world in addition to neighbourhood-based stations, both FM microradio and Internet stations, broadcasting their own locally generated content as well as news and information from other individual communities around the globe. This exchange is largely facilitated through the Indymedia network. Through these projects, then, the lines between global and local spaces are blurred through content production and programming. For example, a global Indymedia feature on nuclear waste is linked with an article from the rural northern village of Gorleben in Germany where an annual demonstration keeps trucks carrying atomic waste at bay. A story from Melbourne details coverage of a videotape broadcast on Australian SBS TV documenting the burning of villages, churches and schools in West Papau, Indonesia by local armed forces. A collaborative piece on asylum seekers in Britain includes a report from Scotland's Dungavel Detention Centre. In essence, this is where the 'hyper global' and 'hyper local' meet (Toft 2003, personal interview).

In this way, 'what is more important – and more relevant – is to consider the use of Internet as radio in terms of an emphasis on its "radiogenic" qualities, to emphasise connection not uniqueness' (Atton 2004, 121), or its 'radiobility,' the term Jo Tacchi (as quoted in Atton Ibid) uses to describe the technical capacity of the Internet to act like radio. Thus, the Internet has radio-like qualities that are not new or unique to the online medium, per se. And what we know from the science of radio waves is that radio itself transcends geographic and cultural boundaries. Radio may be licensed nationally but as with the example of Radio Luxembourg in the 1930's and Border Radio in Mexico, radio signals do not need a passport to cross national boundaries, only the signal strength to carry them. Hendy addresses the global/local nexus of radio as such:

> 'While being the local medium par excellence, radio is also able to reach across large spaces, potentially threatening place – specific cultures with its homogenised content, potentially forging new delocalised communities of interest; it has a history in which nation states often led the way in establishing services, but its oral code of communication allows it to tie itself to communities of language which ignore official borders; it betrays a commercial imperative to reach large, high-spending audiences, but it also has a cost structure which creates at least the possibility of a community station surviving on the tiniest of audiences….It is , in short, the most adaptable of media in 'finding its audiences.' (Hendy 2003, 215)

The nationstate is also less useful a framework regarding radio because of the way communities of interest are linked with each other in ways not defined by geographic locality (Ibid). These 'imagined radio communities' do in fact exist and can be sustained so long as there is participant interest as they require little financial cost. What is more interesting when looking at the Indymedia radio projects, for example, are the ways in which activist groups support each other's endeavours and seek ways in which to access local information and promote local sensibilities. These projects speak to this blurring of lines and reshaping of local and global divides taking place among a wide swath of projects online.

Radio X, Seattle and Neighbourhood Broadcasting
Audio streaming and production has been a part of the Indymedia project from the start. In Seattle, 1999, during the massive anti-WTO demonstrations, the birth of the IMC radio was an integral piece of the media landscape along with text, photo, and video. Studio X was set up to broadcast twenty-four hours a day during the week both online and on FM via a pirated signal. The station broadcast the sounds and voices from the street in the form of interviews, call-ins, live reports

and updates, in addition to music, produced in-depth pieces, and interviews from eyewitnesses on the street and analysts.

The station, renamed *Radio X*, now operates out of the local IMC space in downtown Seattle, a public space that offers free walk-in Internet access. The Seattle IMC heartily encourages the expansion of legal, low powered FM stations and micro, or pirate broadcasting but has no legal relationship with the stations in Seattle who engage in microradio, such as *Seattle Radical Radio* and others. In a clever move that is mirrored in other cities, *Radio X* itself broadcasts only online, which is legal. Their broadcast, however, is carried on a number of neighbourhood microradio stations. This results in a decentralised means of operation whereby content production is separated from distribution. Should an unlicensed micro FM broadcaster get caught, they would only lose transmission equipment and nominal production gear rather than a full broadcast studio of more expensive and plentiful production equipment. This is a model of shared responsibility only possible through a decentralised network of community activists.

'Microradio fits nicely into that neighbourhood model' (Toft 2003, personal interview). As a result of the collaboration, the number of 3-4 watt microradio stations has increased, and includes stations like *Rif Raf Radio* serving the community of Maple Leaf Hill. Most micro FM stations in Seattle simulcast *Radio X* live for a majority of the day, and might also include their own neighbourhood information and music programming. To further break down this space where the hyper local and hyper global meet, about 80% of programming on *Radio X* itself comes from news and public affairs shows culled from other Indymedia and community radio webcasts from around the U.S. and other parts of the English-speaking world. For example, a typical day might include the morning news from community station *KBOO* in Portland, *Democracy Now!* from Pacifica Radio in New York, *Radio Keyser* from Amsterdam, *San Francisco Liberation Radio* news hour, 'random microradio.net station' simulcast, *@gitdrop Radio* from KILL Radio and the *Indy Radio* news show from Los Angeles.[2] And most of these shows themselves pull from an international array of original audio and stories from stations and Indymedia sites around the world. The remaining 20% of program schedule for *Radio X* is produced in-house of which 80% is music. *Radio X* thus participates in an ad hoc network model run collectively in a decentralised fashion utilising free and non-proprietary content and software shared through a global exchange facilitated in part by the Indymedia project. It should also be noted that the local decentralisation among micro broadcasters may also be necessary due to the proximity of the FCC. There are only four FCC offices throughout the country and one happens to be across the lake from Seattle. 'Smaller signals are harder to find' (Toft 2003, personal interview).

In short, it is useful to return to the notion of a form of radio whereby the listener is reinstated as a 'subject-participant' in the sharing of political and creative power (Barnard 1989, Lewis and Booth 1991). What is particular in this example from Seattle is the profoundly neighbourhood aspect of community radio. This model brings together communities of geography and communities of interest, but is nevertheless largely defined by location and proximity since the frequency range is limited. There exists no legal means of gaining a license to start a new community radio station in large and medium sized cities in the U.S. until new legislation is passed in Congress to expand low power radio. The Seattle Indymedia radio project is one example of how a group is working around that impasse by creating a network of smaller micro stations less likely to be seized by government regulators, which at the same time uses both analogue and digital technologies in tandem. The FM broadcasts provide a neighbourhood-based access to local listening and different opportunities for production, while at the same time, the Internet station is able to reach beyond the local area and participate in global radio streams as well.

KILL Radio Los Angeles
KILL Radio, tag line *KILL Corporate Radio*, emerged out of the local Los Angeles Independent Media Centre following the Democratic National Convention protests in August, 2000. *KILL* is run by a volunteer group of around fifty activists, journalists and DJs and operates as a non-hierarchical community radio station and a successful example of a station based wholly on the consensus model of decision-making. 'I feel the main reason *KILL* is important is because it's a collective, with a shared mission and vision … At *KILL*, it's your station. If you don't want the social responsibility to the group, fine. Go do your own thing because that's not what *KILL* is about … If you agree with the project, the power is there to be shared' (Burnett 2003, personal interview). The value and effectiveness of decision by consensus is shared throughout the *KILL* collective and training in the consensus process is required. 'People come to defend the process' (Ibid).

KILL Radio is an online station that is also unofficially simulcast by a separate entity on an unlicensed frequency – a frequency that not coincidently has been home to many of Los Angeles' pirate stations due to its unique location on an immensely crowded bandwidth that does not interfere with any near-by licensed station signals. *KILL* broadcasts primarily music and relies very little on syndicated content. 'Music speaks to people in a way no other medium does. It's not a coincidence that more people are attracted to pirate radio because of the music, and that more kids are interested in music than in media production or public affairs. *KILL* is the power of that expression' (Burnett 2003, personal interview).

There is a news programme from 6-7pm and a few other public affairs shows on air, though some DJ's blend a mixture of music and spoken word or political speech within their program. Overall, programmers are left to program what they want. '*KILL* radio's market is in the diversity of the programming of not knowing what you'll get when you turn it on' (Burnett 2003, personal interview).

KILL's notion of freeform radio is best illustrated through a sampling of show titles and descriptions. The musical offerings are diverse and quirky and the public affairs programming covers a variety of areas (homelessness, animal rights, arts and culture, anarchist politics, media democracy). Other programmes include comedy (*Shiny Things That Take Their Pants Off*), radio drama, show tunes and religious programmes. The show descriptions themselves are often reflective of both a tongue-and-cheek attitude ('provocative, outstanding, and very intensely interesting because Nicholas Richert is a very interesting person') and rage (*Lying Media Bastards With Jake: Music. Anger. News*).

If traditional FM is about narrowly defined music tastes, the eclecticism of *KILL's* schedule is representative of community-oriented, collective programming whereby individual show producers have free reign over what they broadcast. Many of *KILL Radio's* shows bring together music and politics ('positive vibes & dance party fun, brought to you by Amanda & Shannon, community-style politics, art, multilingual love & shit'). It should also be noted that their schedule does reflect their FM broadcast in subtle ways in terms of programming geared towards Los Angeles' large homeless population (*Radio Skid Row With Joe*), as it can be presumed few homeless people have access to the Internet. Even in the space of public libraries with free high speed Internet access, there is little capacity for online listening in that environment.

Burnett expresses strong views about the nature of community radio, even among pirate broadcasters. He sites an example of an individual, young pirate broadcasting all older punk rock music each night. 'He was the antithesis of community radio. It was all about him. His taste … He got drunk on air. It was entertainment, nothing wrong with that, but it's a waste of a resource if you don't cast a wider net and seek wider participation and viewpoints' (Burnett 2003, personal interview). This critique is based on valuing certain organising principles and structural models over others, i.e. communitarianism versus individualism. Motivation is thus a more useful way of discerning the goals of a project than whether or not it is Internet or analogue based (Hendy 2003). Burnett offers that even among those whose mission is to reclaim the airwaves, there is a decidedly different approach among community-based broadcasters and individual broadcasters, even within the world of pirate radio.

This also addresses the question of scarcity on the FM dial, even – or especially – among microradio broadcasters in a city the size of Los Angeles with very little open space for a pirate to slide into without interfering with another station's signal. Does it matter if someone prefers to do their own thing when broadcasting online where there is more limitless space? While Internet radio is a valuable and useful site for broadcasting and content sharing, and offers the space for both the profane and profound, access to the FM or AM bandwidth for community organisations remains a vital step towards ensuring our best hope for a more democratic media in all its forms. Just because something is online doesn't mean anyone is listening.

London Indymedia and Resonance FM

The London Indymedia radio collective produces a weekly program called *Indymedia News Wire* self-described as 'news updates from the independent minded website crew'. The Los Angeles Indymedia also produces a similar program for their local FM community radio station Pacifica Radio's KPFK, as do other Indymedia's. In London, the program airs on *Resonance FM*, a low-powered community radio station in central London, on air since 2002 as part of the British government's pilot scheme for Access Radio. *Resonance FM* is 'London's first radio art station' and is overseen by the London Musicians Collective. There are few news-oriented current affair programmes on the station in light of its unique mandate for arts and culture programming.

The structure of *Indymedia Newswire* is not unlike other Indymedia radio programmes, and includes a combination of audio collected on Indymedia sites, newswire and feature stories read from Indymedia sites, and local audio produced from UK actions and demonstrations including both live on-air and taped interviews focussed on issues relevant to London. 'We use music to punctuate and to break up the flood of talk but it is usually political music … We have been criticised for using some of the same music over again so we are always looking for new suggestions!' (Quinine 2003, personal interview). The collective encourages a diversity of on-air voices and is not proprietary over welcoming people to read each other's scripts if they show up to the studio during the live broadcast. 'The challenge is to make (the show) as inclusive as possible with the constraint that at the end there can only be a small number of people in the studio at a time' (Planetmail 2003, personal interview).

Radio.indymedia.org

The global Indymedia radio site is a 'collaborative website serving the global Indymedia network intended to help create and distribute radical radio programming' (radio.indymedia.org). The site was set up about three years ago and launched around the demonstrations at the meeting of the FTAA (Free Trade Area of the Americas) in Quebec in 2000. It was the first site to attempt global co-ordination of the audio efforts among Indymedia projects. Through the example of radio.indymedia, we see the literal convergence of local content within the global site and how software has been developed to foster that process.

The site is accessed directly from the global Indymedia home page and local Indymedia audio pages. The site itself is home to an array of community radio resources and audio programming whose look and structure loosely follows that of the Indymedia sites. It has undergone a few developmental changes and is in the process of undergoing further restructuring to improve utility and clarity. Specifically, the site includes links to other sites where free audio content and programmes are available for download or rebroadcast on not-for-profit stations such as *radio4all.net*, as well as an ever-expanding list of local community radio and syndicated programming available, webcasting stations, and community radio stations. Additionally, there are audio archives from special event programming such as coverage from the massive anti-war demonstrations and audio-related postings.

Radio4all.net, like Indymedia, was created 'to provide ourselves with the means to share our radio programs via the internet … our goal is to support and expand the movement for democratic communications worldwide' (radio4all.net/about.php). The site describes the project as a 'producers cooperative' to serve as a means of distribution of broadcast quality audio for the sharing of content, and to provide poorer stations free access to news and reporting from all over the world. The reason these sites are necessary is itself a product of both the social and technical needs. People want access to the programmes and many organisations cannot afford the cost of satellite fees for real-time transmission, nor could many afford the hosting fees for carrying an archival history of audio files. From students striking at a university in Mexico City to Food Not Bombs, Earth First or the Weekly Freak Show, each of these groups has benefited from sharing their content through radio4all. Sites like Radio4All and Indymedia are not rivals with each other, but rather, link back and forth, thus building an inclusive movement rather then one based around competition.

The Global Newswire & liveradio@indymedia.org
There are two key features on the global radio site that require consideration here. First, as of summer 2003, the global radio collective launched a continuous radio stream to allow listeners to hear twenty-four hour a day audio from various local Indymedia networks in real time. The globally coordinated stream runs on software that takes audio streams from individual sites and automatically switches from one to the next as the program schedule dictates. This was an extensive undertaking as specific software had to be tweaked and it requires a higher level of maintenance. One of the intentions of the stream was to make it easier for community radio stations around the world to simulcast any portion of the stream as interest in the schedule dictates, and to offer local Indymedia's a place to broadcast their content to a wider audience. As one activist describes it: 'By mixing the content from many local cities around the world we can hopefully show how the world is reacting, as it happens, from the ground. Breaking new ground here in global radio collaboration!' (Quinine 2003, personal interview).

The second significant site feature is the global newswire, which is an automated syndication newswire that mirrors (duplicates) audio from other local Indymedia sites so audio files can be found in one centralised location. The software was written by Alan Bushnell (2003, personal interview) who explains: 'You have all this audio from over a hundred local Indymedia sites hosted on about thirty servers around the world and lots of people constantly searching these sites on a weekly basis trying to find audio for their local radio programs. There had to be an easier way' (Ibid). Due to the decentralised structure of the Indymedia network, only about half the servers are currently set up to send audio posts to the audio newswire as it requires that additional steps be taken by local Indymedia tech people.

Resources
There are a number of key issues that arise out of a study of the global radio Indymedia projects. First and foremost are the issues common to Indymedia in general and should ring familiar to almost anyone involved in volunteer projects, and that is the need for greater resources, both technical and personal. With regards to audio specifically, even with the increase in high speed internet connections, there are inefficiencies inherent in the process. Further, there is of course an even greater disparity of resources among Indymedia networks in less technologically developed countries.

In developing the global radio newswire, it became clear to Bushnell the complexity of trying to implement network-wide systems with such different

technical standards across the IMCs. There also exist disparities among server capacity, in other words, the ability for a site to provide and a listener to access audio during a heavily trafficked period online. One solution that was created to provide server space for event broadcasting was *D.R.O.P. – Distributed Radio Open Publishing.* D.R.O.P. creates a robust webcasting network by enabling servers to mirror other servers thus expanding capacity to allow more people to access audio without crashing the system. D.R.O.P. was used, for example, to provide the necessary additional bandwidth for webcasting during recent high-profile actions such as those around the World Social Forum in Porto Alegre and the World Economic Forum in New York. It is an internal function that the end user would never notice, but is a significant network infrastructure improvement that is organised on an ad hoc level as needed.

Because there are a number of people individually producing radio programs with similar formats on local broadcast community radio stations using content from Indymedia, the global newswire helps eliminate some of the time-consuming work of trolling through all the local sites searching for audio content, but it is limited in that it covers only half the sites. And, in a world of limited voluntary resources and unlimited ideas and projects to be undertaken, there is a fair amount of repetitive work being done by those spending hours searching for audio, articles, and translations. Time is very much a key resource and means of eliminating repetitive tasks among the network and for other independent media producers is at the foreground of project development.

There is a caveat to the free sharing of produced content. *Free Speech Radio News (FSRN)* is a daily syndicated progressive news programme airing on hundreds of FM and Internet radio stations across the US and elsewhere. A producer there voiced concern that *FSRN* could set a dangerous anti-labour precedent if they started pulling free audio as it would take away from money they would pay a correspondent and they have an expressed commitment to pay for stories (Anonymous, 2003, personal interview). Their commitment - and ability - to pay people for stories is an exception to the experience of most community radio producers, but is nevertheless worth mentioning as it speaks again to the broad question of resources and time for those involved.

Language
Further related to resource issues facing all Indymedia projects is the question of language. For those broadcasting Indymedia programs on local community radio stations in the US and UK, the need for translation of stories has severe limitations on the diversity of content that can be accessed. At present, it seems this is being addressed on the local or regional level with individual producers trying to bring those with multiple language skills into the fold. In London, for example, there is

genuine excitement around a new volunteer who speaks Russian, Czech, French, Spanish, and English and has been able to bring a whole new level of depth to the show by translating stories directly from non-English language sites.

Indymedia London radio activists are also involved in the creation of a regional audio stream across Europe which would bring together more multi-lingual programming. There is a website under construction (http://euroradio.indymedia.de) to create such an audio stream portal. The site text describes the mission of the project:

> The EuroRadio Website will link to free/alternative radio streams by European radio groups and media activists. We hope to initiate a network of regular programmes which you can access from this site…So, for example, on Monday night Indymedia Berlin would bring you the latest local and international news plus some of the latest tunes from the German capital. On Tuesday at the same time, IndyRadio Austria would stream live from Graz. On Wednesday there would be an hour-long show from London, on Thursday you would get the latest from Catalonia … Check this space.

It could be argued from a listeners' standpoint that such multi-lingual programming is not enticing. It seems, however, that such efforts within the network to move beyond the primacy of English is more about sharing access and information, and creating new programme models then obtaining the highest audience numbers. It also, though, speaks to the multi-lingual nature of many Indymedia participants, especially in a city such as London where a significant percentage of the collective is comprised of people whose first language is Spanish, German, Portuguese, Russian and Italian.

Audience
The global audio site is for the casual listener who visits Indymedia to listen to feature stories or find webcast links, the local program producer in search of locally-situated stories from Indymedia projects around the globe, and the local webcaster who is looking to carry the Indymedia global stream during a major event or portions thereof. Thus, the line between producer and audience is again blurred here. There are also multiple links being made within the Indymedia network as a result of both the global and local audio programmes and the number of connections being made outside the network to the greater world of community media is strong among audio collectives. The content sharing that exists is highly effective, despite some practical issues, and enables local microradio broadcasting to be both 'hyper local' and 'hyper-global' (Bushnell 2003, personal interview) at the same time. A low-powered community radio station can include news on a

neighbourhood level and at the same time pull grassroots news from other localities around the world.

There are ideas circulating regarding how to better share content and meet audience needs. One is to package audio content in a syndicated format not unlike *OneWorld Radio*, which compiles a syndicated program from radio produced by local affiliates for community stations to broadcast. Another is to integrate Indymedia content into a file-sharing network similar to *Napster* whereby facilitating a more centralised point of exchange for audio. Further, some have suggested Indymedia host and facilitate an open access file-sharing network like Napster for independent music. 'As copyright protection interests crack down on non-copy written material, the door is opened for the free exchange of "unprotected" productions' (Bushnell 2003, personal interview). Others have advocated expansion of the network model on a national scale through the creation of a countrywide string of microradio stations all broadcasting the same signal. Yet another is to create a more formal group of stations that say they want to be a part of a global broadcast network complete with a greater detail of programming offered with the potential for web stations to eventually update their own online schedules.

Last year, the *Critical Mass Radio Network (CMRN)* was formed to establish a monthly, coast- to-coast coordinated broadcast among microradio stations around the country (criticalmassradio.net). The idea is to forge a national radio network out of the efforts of small, independent radio stations. The first CMRN broadcast took place during the Republican National Convention to cover protests in New York City in August, 2004. CMRN serves as another example of groups using a global platform to highlight and support existing local productions rather then recreating new large-scale entities. This question of scale and reproduction is also interesting because of the earlier questions raised regarding limited resources and because again, there is interest in accessing these hyper-local spaces.

Ogg v MP3

There is a commitment within the Indymedia network to use non-proprietary, or free software, and open source software. Many involved with Indymedia actively participate in local *hacklabs*, community spaces established for the exchange of knowledge, resources and software. Indymedia activists are also involved with peer-to-peer movements, and in the UK, alongside European collectives as part of the campaign around the UN's World Summit on the Information Society (WSIS) via the *Hub Project* (hubproject.org) and others. The open source software movements 'has led to new ways of thinking about what it means to be a creator'

(Atton 2004, 1) and new ways of thinking about alternative media production as beyond content and including technical infrastructure.

With respect to audio, there is an internal debate at present as to the preferred format for audio files and streaming. This debate is not, however, simply about tech people trying to out-tech each other. The issue touches on fundamental organisational and philosophical principles of the Indymedia network, namely that of decentralisation and local autonomy, as well as the support and promotion of open access software. Ogg Vorbis is a 'completely open, patent-free, professional audio encoding and streaming technology with all the benefits of Open Source' (vorbis.com).[3] MP3 (Media Player 3) is patented technology run by a for-profit company. When it was just a small start up, MP3 offered very loose licensing agreements, but much of that has changed in the current environment. MP3 was originally intended only for playing saved audio files and not for webcasting and it is clear that Ogg is not only politically more appealing but technologically superior with a higher quality of sound.

The problems of switching to Ogg again mirror broader network issues. The first and most basic being the fact it is a time-consuming and intensive process to reconstitute an audio site into a new format and with limited resources it is difficult to justify putting energy into something that works as it is. 'In Seattle, it's all we can do to maintain our MP3 stream. We can't put energy into changing systems' (Toft, 2003, personal interview). Further, and perhaps even more practical, is the fact that not all audio players support Ogg thus rendering it difficult for many end users to access the audio at all. While *Winamp* and *QuickTime* do, *RealPlayer* does not. Another serious obstacle is for those who stream audio from an array of community and webcast stations, most of whom broadcast and make audio available in the MP3 format. If Indymedia radio switches to the Ogg format, it creates additional work to move between formats for already resource-strapped producers trying to focus on obtaining quality content.

In terms of making a formatic switch within a decentralised network, there is a practical argument for putting off such a transition. At the same time, there are those who say Indymedia should take a more proactive stance to the evolutionary dilemma of 'the chicken and egg problem' and that something won't happen unless more people use Ogg and Indymedia should encourage such a transition. Perhaps such a process can be facilitated by providing more links for listeners to learn more about the benefits of particular open access software and assist in accessing audio players that support such software. In the meantime, plans for a coordinated global stream to broadcast during the most recent day of global anti-war demonstrations failed in part because of an inability to achieve consensus on the technical format. Thus, an opportunity was lost over the inability to resolve the

debate in time. This is a useful example to showcase the levels on which ideology permeates structural decision-making within the IMC. Regardless of the immediate outcome, the right questions are at least being asked.

Conclusion

The core issue for the Indymedia project is about building networks of communication among the global and local networks, and the radio piece is one medium that's trying to facilitate the movement. The war in Iraq has (re)politicised people on new levels and the resurgence of activism is profound. At a time when the music industry has waged war over performance royalty fees exclusively for Internet broadcasters and movements for low powered community media flourish, the free forum of Internet audio has been dramatically altered. The early potential of radio was realised through the efforts of amateurs and non-licensed hobbyists. Though new technology makes possible this convergence of on-line and traditional broadcast mediums, the future may be up to the new pirates of the digital age.

The projects that have taken advantage of Internet have succeeded in breaking down barriers to access between localities and the global sphere. What is interesting in the Indymedia radio projects is the creation of a 'hyper global' site to share and disseminate 'hyper local' news, information and styles and is not just a one-way flow of local-to-local listening. Rather, through Indymedia, local communities retain access to self-representation and reporting and benefit from access to the same in other neighbourhoods and towns.

Indymedia's commitment to anti-corporatism and open access is about both software and information. The project of reclaiming the airwaves is one that transcends material output. There exists both the intersection of digital and analogue technologies across community-based projects, and how global and local broadcast spaces converge online. The ethos of community radio is not defined by or limited to its means of delivery or production. In this transnational era, necessary and important focus has been given to the future of digital, satellite and Internet radio as a means for increased flows of information and culture irrespective of geographic boundaries. At the same time, however, radio remains primarily a local experience. The contested site of audio broadcasting is both beyond the national framework via new technologies and at the same time rooted in locality, even when online.

Scarcity, commercialism, corporate influence, government protectionism/ paternalism, and fear are all reasons why a broadcasting space has nary been established to allow community voices to proliferate across the dial. There are citizen's movements flourishing around the globe arguing for a small piece of the broadcast pie at the same time as they advocate for open access to wireless

networks and Internet infrastructure and software. If publicly minded choices are made, we could see a future of radio that includes ubiquitous, free Internet access (and thus free on-line radio/audio) over the airwaves that could replace FM and satellite radio. If the corporate agenda prevails, new technologies will continue to be commodified, constricted, metered, filtered, and narrowed. There will always be projects offering an alternative that have found some space in whatever medium. As Indymedia's home page proclaims: *Don't hate the media, be the media!* The key is how much legitimisation will be afforded such spaces via policy implementation.

Notes

[1] from indymedia.org Open Publishing Proposal.

[2] http://radiox.org.

[3] The derivation of the name Ogg Vortis must be noted. "An 'Ogg' is a tactical manoeuvre from the network game 'Netrek' that has entered common usage in a wider sense. From the definition: To do anything forcefully, possibly without consideration of the drain on future resources. "I guess I'd better go ogg the problem set that's due tomorrow". "Whoops! I looked down at the map for a sec and almost ogged that oncoming car". Vorbis, on the other hand is named after the Terry Pratchett character from the book _Small Gods_. The name holds some significance, but it's an indirect, uninteresting story". See http://www.xiph.org/xiphname.html for a more detailed response to the query *'what does your name mean?'*

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