

ALTERNATIVE RADIO AS RESISTANCE:
THE CASE FOR SOUND TRANSMISSION



Paul Bröker
Environmental Architecture

keywords:

radio, transmission, resistance, network, sound, aural, dialogue, alternative, community, platform, collective

synopsis:

Alternative radio networks have long played a pivotal part in resistance movements. Their affordability, accessibility and outreach lend themselves well to grassroots causes. With the rise in influence of online platforms in organising social action, is there still a case for continuing to establish sound transmission networks? This essay will explore the specific strengths of oral-aural communication in order to evaluate the relevance, efficacy and merit of radio networks today. It will look at a variety of textual case studies of past and current alternative radio stations from academic sources and magazines. It will also use several current online alternative radio stations as objects of context and research, both through listening to their broadcasts and visiting their headquarters. Using the findings of this research, I will assess whether an alternative radio network is an appropriate, feasible and ultimately useful and powerful intervention in my own fieldwork in West Kalimantan, Borneo, Indonesia, as the Simpang Dayak take on industrial palm oil plantations.

word count: 3,299

"The voice is far ahead of the face."

Deleuze & Guattari, *A Thousand Plateaus* (p.302)

Noises, sounds, signals

Sound existed before humans existed. As Douglas Khan writes in his book *Earth Sound Earth Signal*: "nature...has always been the biggest broadcaster...nature was broadcasting globally before there was a globe. Radio was heard before it was invented, and radio, before it was heard, was."¹ In 1876, Thomas Watson, Alexander Graham Bell's assistant, unwittingly stumbled across some intriguing sounds when the first telephone line acted as an antenna interacting with naturally occurring currents². Since then, many sound artists, such as Alvin Lucier, started tuning in to this 'natural radio'; tapping into electromagnetic waves moving around the ionosphere, Lucier, amongst others, re-created sounds from these waves, which he called 'whistlers'. If it took this long for a new sound to be heard by humans, it begs the question: what other sounds are out there that we are yet to hear? The whistlers tell us something: they tell us that lightning has struck, somewhere. What other sonic messages are out there? Aside from the using technical machinery, we are routinely exposed to plenty of sounds that our human ears can pick up. But do we notice all of them? What do they all mean? When does a noise become a sound become a signal?

Pettman asserts that we humans are sonic beings that struggle to accept this defining characteristic and refrain from using it to our advantage³. Instead, we have guided our culture towards a dependency on visual interpretation. Yet our first experiences on earth are defined by sound before birth. While we are able to shut our eyes, the ear remains vigilant at all times. The ear can help better dissolve differences between beings in comparison to the more critical, less intimate eye⁴. Despite this strength in objectivity, Pettman describes our interpretation of the the voice as being "ambiguous, ambivalent and enigmatic"⁵, which has led us to breed a lack of trust in aural signals compared to visual cues. He calls for us to listen to more sounds we may have cast off as noises, including those from non-human sources in the hope of empowering both sound-producer and listener.

¹ Khan (2013): p.2

² Ibid

³ Pettman (2017)

⁴ Ibid

⁵ Ibid: p.5

Alternative radio

Radio airwaves have long been home to alternative discourses to dominant ideologies around the world, particularly in moments of oppression and struggle. Famous examples include Radio Londres broadcasting intelligence to French resistance in World War II, WENN and WGIV gathering support in America's Deep South during the civil rights movement, and the Voice of Algeria radio station's influence in obtaining independence for the country⁶. Communication via radio has helped give a platform to voices and ideas, which may lie outside of mainstream politics and which are usually ignored⁷. Bailey, Cammaerts and Carpentier state that alternative media should "serve the community, offer counter-hegemonic discourses to power, and be autonomous from the state and market influences".⁸ Although alternative radio stations and broadcasts - considered the third type of radio alongside commercial and state radio⁹ - do not necessarily have to be counter-hegemonic¹⁰ or oppositional¹¹ to fall into the



Image 01: Zapatistas participating in an autonomous radio communications network in Caracol de la Morelia, Chiapas, Mexico

⁶ Cook (2022)

⁷ Bailey et al. (2008)

⁸ Moyo (2013): p.842

⁹ Bailey et al. (2008)

¹⁰ Ibid

¹¹ James (2021)

category of 'alternative', what defines them is a democratic space, in which distinctive and significant ideas can be shared by communities for communities. This paves the way for radio as a setting and tool for resistance against dominant power structures.

Problems with other alternative media

Although beyond the scope of this essay, it is worth outlining some of the characteristics of the other forms of information transfer and communication before diving into radio broadcasting and its merits as a resistance medium. This summary will contribute to the case for sound transmission.

Social media providers have become the "curators of public discourse"¹², playing a significant part in organising social movements. As private corporations, they have market-based agendas, which can come into opposition with resistance movements, and they can attempt to influence policy surrounding information. Social media algorithms can be taken advantage of by activists in order to develop a collective identity¹³, but this textual information leaves traces, including locational data¹⁴, which can be used against oppositional action and commercialised to perpetuate capitalist systems¹⁵¹⁶, very often the systems that are being fought against. In addition, algorithms can - intentionally or unintentionally - serve to reinforce views, creating echo chambers¹⁷, which can in turn influence social action¹⁸. Online platforms operate with sets of rules that corporations determine¹⁹, demonstrating the power these businesses have in controlling the format and even outcome of dialogue. Some of these platforms also operate with a hierarchical system, which can run counter to democratic processes and goals²⁰. While digital media platforms have brought people closer, individuals do not need to share coherent collective identities to share virtual spaces, which can dilute the impact of movements²¹. The nature of online presence means collectives can quickly form but can dissolve just as fast, creating short-lived, ephemeral and ultimately ineffective action²². Print-based media can alienate whole swathes of cultures who do not principally engage with

¹² Gillespie (2010): p.347

¹³ Milan (2015)

¹⁴ Barreneche & Wilken (2015)

¹⁵ Ibid

¹⁶ van Dijk (2014) in Jackson & Kuehn (2016)

¹⁷ Murillo (2008)

¹⁸ Milan (2015)

¹⁹ Poell et al. (2018)

²⁰ Ibid

²¹ Bennett & Segerberg (2013) in Kavada (2016)

²² Poell et al. (2018)

written information²³, and are costly to set up, less instantaneous and reactive, and can be logistically difficult to disseminate widely. Visual media can be associated with sophistication and modernity²⁴, and therefore inaccessibility, which can alienate media consumers, and productive, ongoing dialogue is difficult to achieve.

The remainder of this essay will explore the reasons why radio can be a powerful communications medium in resistance fights.

Accessibility of radio production and consumption

Mass media have often been used to spread a dominant ideology and exert control over people. In America, commercial transmissions were utilised to justify and drum up support for land seizures and the erosion of Native American culture²⁵. All aspects of media production are therefore significant when considering the influence of media, including who is in charge, who supplies the funding and who controls the editing. The re-appropriation of these media platforms so that they meet a community's needs and views is a powerful action of resistance in itself²⁶. Radio has often acted as an echo chamber for opinions shared on the television and in the newspapers, helping maintain power structures²⁷. By diversifying the conversation on these traditionally monotonous platforms, new perspectives are heard and marginalised groups can gain recognised, legal status in the long run as a result. The use of radio communication is particularly effective in supporting alternative cultures and politics because in many parts of the world, it is often the sole means of obtaining news. Radio infrastructure is relatively cheap for producers of content, making it an accessible and universal form of communication. No internet signal is needed for radio transmission. If the Internet is used, a relatively very low bandwidth is required, keeping costs low and enabling a wide geographical reach, and ordinary, ubiquitous objects such as telephones can be used in the transmission process, further improving accessibility. Murillo describes the set up of a reporter covering an Indigenous and peasant community march in Cauca, Colombia, in 2004:

"An Indigenous reporter riding up and down alongside the march on a *radiocicleta* – a tandem bicycle with a loudspeaker and a small transmitter sent reports back to a student-run radio station at a university in Cali, which in turn redirected the signal via telephone to Radio Payu'mat, the local station in Santander de Quilichao."²⁸

²³ James (2021)

²⁴ Bailey et al. (2008)

²⁵ Echo-Hawk (2008) in Wilson & Stewart (eds.)

²⁶ Wilson & Stewart (2008)

²⁷ Murillo (2008)

²⁸ Ibid: p.146

In Bulawayo, Zimbabwe, Radio Dialogue would get round legal controls on dissemination by distributing their radio shows by CD and cassette. They would record their music, news and current affairs discussions and distribute their content on the hardware to bus and taxi drivers, who would play them on vehicle radios initially, before the programmes made their way into other spaces such as pubs and beauty salons. Pirate radio in Greece came out of the do-it-yourself movement in the 1970s, responding to dissatisfaction of the functions of the state²⁹. Temporary Autonomous Radio was launched in Montréal using a \$20 kit ordered online and a couple of days soldering³⁰. The ease and affordability of producing content is evident in these examples.



Image 02: A *radiocicleta* in Bogotá, Colombia

Radio communications are therefore also accessible for the consumer. Personal radios are widely owned because of their affordability and do not require internet signal, making them free to run once purchased. Because the aforementioned march in Colombia was broadcast via radio signal, a significantly larger audience, already equipped with radios, was able to connect with it without needing to attend³¹. Since the event reached a far larger audience via the airwaves, its profile was raised significantly to a point at which the Indigenous movement has now become part of the conversation and debate at a national level in the country³². Similarly, the organisation and effectiveness of the indigenous protests, strikes and blockades in Bolivia, which resulted in the successful appointment of Evo Morales, was significantly enhanced by the network of street reporters and community radio stations on the ground, spreading messages of mobilisation and gathering support amongst the masses³³.

By spreading messages sonically, solidarity networks that may not have existed otherwise in physical space can be created. Mary Lou Smoke, who is Anishinabe, co-created a radio programme called *Smoke Signals* with her husband Dan Smoke in Canada, in which they "expose Canadians to Native renditions of reality and...promote symbolic "healing" in, and social justice for, Aboriginal

²⁹ Mylonas (2013)

³⁰ van der Zon (2010)

³¹ Murillo (2008)

³² Ibid

³³ Dunifer (2010)

peoples".³⁴ She states that since creating the radio show, she established a women's network by connecting the friendships she made when meeting her listeners. By eroding the spatial separation of women facing similar issues, she was able to create a network of active Native American women fighting for Native American rights³⁵. As Castells writes, it is no longer important that communities are in proximity geographically in order to be tight-knit, since digital technologies have challenged the limits of space and time³⁶.

However, increased connectivity does not necessarily result in *collectivity*, since individuals might not need a strong shared cause to seemingly be part of the same movement when bound in virtual or digital space alone³⁷. Connectivity, as opposed to collectivity, may not be a long-lasting, productive trait for social action, which can result in positive action dissolving rapidly³⁸. It is debatable whether radio networks, or any digital network, can fully replace physical connections.

Sound transmission for valorising alternative cultures

Cultural theory and the academic world in general are dominated by formal written records. By elevating the importance of the textual in relation to other epistemological formats, other methods of knowledge transfer and dissemination can be devalued, such as oral. As Kittler asserted, "The revolution of the European alphabet was its oralization"³⁹ - communication through language is at its strongest when delivered verbally. William Henry writes about how the reggae sound system culture of the 1970s and 1980s UK acted to shine a light on an "alternative living history to formal written culture and to the white bourgeois literacy of the enlightenment"⁴⁰. The act of sharing stories through sound challenges the dominant form of written historical material, which is far more widely accepted in the UK, providing new, alternative histories. It publicises information that many marginalised communities relate with more; in the case of reggae in the UK, it brings one of the identities of the black community to the fore, giving it a stronger standing in the public sphere. Meanwhile, Nasa communities in Colombia are using radio to cultivate an alternative Colombian identity and culture in opposition to the mainstream one, which they see as defined by materialism, militarism and corruption⁴¹. Recording and archiving conversations, dialogue and oral statements can be an impactful way of empowering communities who rely less on written modes of communication.

³⁴ Buddle (2008): p.129

³⁵ Ibid

³⁶ Castells (2000) in Moyo (2013)

³⁷ Bennett & Segerberg (2013) in Kavada (2016)

³⁸ Poell et al. (2018)

³⁹ Kittler (1990): p.32

⁴⁰ Henry (2006) in James (2021): p.5

⁴¹ Murillo (2008)

Radio networks as decentralised, democratic, independent, hidden public spaces

One of the key strengths of radio networks is that they can be decentralised. Certain radio stations could be said to be rhizomatic, a concept, which Deleuze and Guattari describe in *A Thousand Plateaus*⁴² and which Sakolsky has applied to media⁴³. In contrast to arbolescent structures, which display elements of hierarchy and non-dynamism, a rhizome "connects any point to any other point".⁴⁴ This characteristic has several benefits. Firstly, by having more than one centre, radio networks can create autonomy and power for the many contributors. What results is a democratic system that accommodates different perspectives and world views, moving away from elements of hierarchy.



Image 03: Balamii Radio headquarters in Peckham, London. The unit is located in the town centre and the door is always open as long as the station is running, encouraging community members to step in, chat and get involved.

Further, one of alternative radio's key principles is community participation at all levels⁴⁵. In contrast with commercial or state radios, in which public participation does exist but in limited ways, alternative radio's producers and consumers are thoroughly entangled: community members who listen to these radio stations are also the producers of shows, or radio station owners themselves. The key difference is between a top-down model of public communication, forcing mainstream opinion upon the masses, and a bottom-up system, in which empowerment and participation *are* the mainstream, no matter the opinion⁴⁶. As Maya Al Khaldi writes in an interview about Radio Alhara in Palestine: "Resistance is when an oppressed individual makes sound and space for itself in the presence of an oppressor."⁴⁷ By publicising its whereabouts at any given time using a black flag with a skull, Temporary Autonomous Radio was inviting local participants, who were in close, physical proximity to the station, to talk and get involved

⁴² Deleuze & Guattari (1987) in Bailey et al. (2008)

⁴³ Sakolsky (1998) in Bailey et al. (2008)

⁴⁴ Deleuze & Guattari (1987) in Bailey et al. (2008): p.26

⁴⁵ Girard (1992) in Bailey et al. (2008)

⁴⁶ Moyo (2013)

⁴⁷ Cook (2022): p.152

in broadcasts, live on air⁴⁸. By opening the conversation up to as many people as possible, transmissions are topical and inclusive. This operational method also demonstrates the possibilities of what true democratic processes can look like, exposing and publicising what are usually internal processes⁴⁹. Sharing community struggles can contribute to forming bonds and solidarity within communities, but also between communities, as achieved in the case of Mary Lou and Dan Smoke's *Smoke Signals* radio show in Canada⁵⁰.

However, just because a radio station might be considered alternative does not mean it is automatically democratic. Truly democratic processes must be actively sought out; anti-establishment radio content can co-exist with newly-formed, hierarchical power structures. It is difficult to achieve full autonomy in user-led networks and operational trade-offs that forgo some elements of independence and democracy may well have to be accepted⁵¹.

Image 04: Installing a pirate radio transmitter on a London rooftop. If transmitters were ever located by the authorities and removed, pirate radio stations would almost immediately install a new one on a different rooftop, making pirate radio stations very difficult to shut down completely.



It is harder to locate the headquarters of a decentralised network. In the context of resistance, this is powerful because oppressors will therefore find it difficult to dismantle oppositional forces; the multiplicity of rhizomatic connections is a key strength, allowing networks to remain connected, even if certain bonds are broken. As Dirar Kalash states about Radio Alhara, no-one can tell where it's broadcasting from⁵². Radio networks often employ tactics of contingency and elusiveness⁵³, allowing them to go off-grid or to transform into

⁴⁸ Van der Zon (2010)

⁴⁹ Kavada (2016)

⁵⁰ Buddle (2008)

⁵¹ loomio.org's reliance on third-party, market-based service providers for their free, peer-to-peer, open source online platform is considered a necessary trade-off in enabling Loomio to achieve its positive social goals. See Jackson & Kuehn (2016)

⁵² Cook (2022)

⁵³ Bailey et al. (2008)

another entity if necessary. Van der Zon describes her Canadian radio station Temporary Autonomous Radio as embracing an intentional state of chaos, resurfacing in different forms at different times, which has enabled its continued existence⁵⁴. In the case of Radio Dialogue in Bulawayo, Zimbabwe, the location in which the programmes were recorded became unimportant - they could easily be replaced. Once the CDs and audio cassettes were in circulation, it was too late for the 'headquarters' to be shut down and prevent discussions being recorded and ultimately aired. Other illegal broadcasts were also received from other external rhizomatic sources outside of Zimbabwe, from Zambia and Mozambique for example, creating a whole new challenge for controlling and quashing anti-establishment discussions⁵⁵. This resilience and adaptability means that radio networks can often escape censorship and survive adversity.

In a similar vein, the aural focus of radio can create a sense of anonymity for content producers, which can have several powerful effects. Van der Zon argues that the ability for media content producers to define their identities is enhanced on the radio because of its lack of visuals⁵⁶. This is particularly important for marginalised communities, who are often discriminated against using visual cues. Temporary Autonomous Radio was dominated by women; being away from the male gaze allowed female hosts to construct their identities without having to consider visual influences⁵⁷. Additionally, the ability to 'hide' on the radio through lack of visual identity can allow for sharing opinions that one might fear could be suppressed or discounted. In the case of women, Fancy Jenny Fortune, one of Temporary Autonomous Radio's hosts, believes that the anonymous aspect of the radio allows for women hosts to open up more freely in a society that does not support women fully expressing themselves⁵⁸.

Anonymity also allows for hosts to broadcast content that might require protecting their own identity in the face of potential danger, or protecting the identity of other subjects involved in content. Hosts and interviewees on Spanish-language radio stations in the USA regularly keep themselves anonymous when discussing issues of immigration law to protect themselves against any potential illegality⁵⁹. Pouf-FM, a pirate radio station based in Quebec City, would regularly broadcast an audio snippet of a tenant and a landlord arguing over rent. This was a real recording, supposed to symbolise tensions between different social classes⁶⁰, which may not have been broadcast visually for identity-protection reasons.

⁵⁴ Van der Zon (2010)

⁵⁵ Moyo (2013)

⁵⁶ Van der Zon (2010)

⁵⁷ Ibid

⁵⁸ Ibid

⁵⁹ Casillas (2014)

⁶⁰ Létourneau (2010)

Music as a connective, collective quilt

The use of music on the radio can be a powerful means of resistance. As Jowan Safadi, a member of Radio Alhara, writes: "Music has the power to amplify your voice and message. One can say the bitter truth in a sweet melody, and everyone will find it easier to swallow."⁶¹ Music is a unifier, which crosses over social boundaries. Dialogue and music can combine and share the same space on the radio. This is crucial, since music can be a much more accessible entry point into more serious, political discussions. For the Fil Mishmish campaign on Radio Alhara, which comprised an online, global protest against the proposed annexation of part of the West Bank, many world-famous DJs and musicians were invited to take part in the radio station's programming, bringing their fanbases with them. Music fans, who may not have been initially aware of the issues discussed as part of the campaign, were subsequently exposed to related political commentary, helping spread the cause far and wide.



Image 05: A t-shirt sold as part of Radio Alhara's Fil Mishmish campaign, showing the global list of DJs and producers involved.

Conclusion

Hearing a voice is an intimate experience: we receive content wrapped in a "sonic envelope"⁶², delivered in "sensual phonetics"⁶³, providing texture and emotion to the sonic information, as well as a distinctly human touch. The ear is more sensitive, more emotionally-demanding, less critical than the eye⁶⁴. As Deleuze & Guattari write, to come full circle, "music...draws people and armies into a race that can go all the way to the abyss."⁶⁵ These qualities of sound are all powerful characteristics that can draw in participants and believers and propel resistance movements forward. Combining them with the the other benefits outlined in this essay, I conclude that radio transmissions can play a significant part in mobilising, organising and inspiring collective action. I now intend to apply my findings to my site of research, West Kalimantan, Borneo, and to assess the potential of helping establish a radio network for the Simpang Dayak in order to amplify their fight against industrial palm oil expansion.

⁶¹ Cook (2022): p.155

⁶² Pettman, (2017): p.5

⁶³ Kittler (1990): p.34

⁶⁴ Pettman (2017)

⁶⁵ Deleuze & Guattari (1987): p.302

Bibliography

Textual

Bailey, O. G., Carpentier, N., & Cammaerts, B. (2008). *Understanding alternative media*. Open University Press.

Barreneche, C. & Wilken, R. (2015). *Platform specificity and the politics of location data extraction*. *European Journal of Cultural Studies*, 18(4-5): p. 497-513.

Buddle, K. (2008). *Transistor Resistors: Native women's radio in Canada and the social organization of political space from below*. In P. Wilson & M. Stewart (Eds.). (2008). *Global Indigenous Media*. Duke University Press.

Casillas, D.I. (2014). *Sounds of belonging: U.S. Spanish-language radio and public advocacy*. New York University Press.

Cook, X. (2022). *The Sound of Solidarity*. *Atmos*, 6: p.148-173.

Deleuze, G. & Guattari, F. (1987). *A Thousand Plateaus: capitalism and schizophrenia*. University of Minnesota Press.

Dunifer, S. (2010). *Latitudes of Rebellion: Free Radio in the International Context*. In A. Langlois, R. Sakolsky & M. van der Zon (eds.). *Islands of Resistance: Pirate Radio in Canada*. New Star Books.

Gillespie, T. (2010). *The politics of 'platforms'*. *New Media & Society*, 12(3): p.347-364.

James, M. (2021). *Sonic Intimacy: Reggae Sound Systems, Jungle Pirate Radio and Grime YouTube Music Videos*. Bloomsbury Academic.

Jackson, S.K. & Kuehn, K.M. (2016). *Open Source, Social Activism and "Necessary Trade-offs" in the Digital Enclosure: A Case Study of Platform Co-operative, loomio.org*. *tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 14(2): p.413-427.

Kahn, D. (2013). *Earth Sound Earth Signal: energies and earth magnitude in the arts*. University of California Press.

Kavada, A. (2016). *Social Movements and Political Agency in the Digital Age: A Communication Approach*. *Media and Communication*, 4(4): p.8-12.

Kiriya, I. (2013). *The Culture of Subversion and Russian Media Landscape*. In M. Castells & G. Cardoso (eds.). *Piracy Cultures*. USC Annenberg Press.

Kittler, F.A. (1990). *Discourse Networks 1800/1900*. Stanford University Press.

- Létourneau, A.E. (2010). *Pirate Radio and Maneuver: Radical Artistic Practices in Québec*. In A. Langlois, R. Sakolsky & M. van der Zon (eds.). *Islands of Resistance: Pirate Radio in Canada*. New Star Books.
- Milan, S. (2015). *When Algorithms Shape Collective Action: Social Media and the Dynamics of Cloud Protesting*. *Social Media + Society*, 1(2): p.1-10.
- Moyo, L. (2013). *Participation, Citizenship, and Pirate Radio as Empowerment: The Case of Radio Dialogue in Zimbabwe*. In M. Castells & G. Cardoso (eds.). *Piracy Cultures*. USC Annenberg Press.
- Murillo, M.A. (2008). *Weaving a Communication Quilt in Colombia: Civil conflict, indigenous resistance, and community radio in Northern Cauca*. In P. Wilson & M. Stewart (Eds.). (2008). *Global Indigenous Media*. Duke University Press.
- Mylonas, Y. (2013). *Piracy Culture in Greece: Local Realities and Civic Potentials*. In M. Castells & G. Cardoso (eds.). *Piracy Cultures*. USC Annenberg Press.
- Pettman, D. (2017). *Sonic intimacy: Voice, species, technics (or, how to listen to the world)*. Stanford University Press.
- Poell, T., Rajagopalan, S. & Kavada, A. (2018). *Publicness on Platforms: Tracing the Mutual Articulation of Platform Architectures and User Practices*. In Z. Papacharissi (ed.). *A Networked Self and Platforms, Stories, Connections*. Routledge.
- van der Zon, M. (2010). *The Care and Feeding of Temporary Autonomous Radio*. In A. Langlois, R. Sakolsky & M. van der Zon (eds.). *Islands of Resistance: Pirate Radio in Canada*. New Star Books.
- Wilson, P., & Stewart, M. (Eds.). (2008). *Global Indigenous Media*. Duke University Press.

Radio stations

Balamii Radio: <https://www.balamii.com>
LONDON, U.K.

Cubitt Community Radio: <https://www.mixcloud.com/live/CubittCommunityRadio/>
LONDON, U.K.

NTS: <https://www.nts.live>
LONDON, U.K.

Radio Alhara: <https://yamakan.place/palestine/>
BETHLEHEM, PALESTINE

List of images

Image 00 Students building a transmitter in a workshop led by Stephen Dunifer
FRONT in Oaxaca, Mexico
COVER *Stephen Dunifer, January 2007*

[Source: Dunifer, S. (2010). *Latitudes of Rebellion: Free Radio in the International Context*. In A. Langlois, R. Sakolsky & M. van der Zon (eds.). *Islands of Resistance: Pirate Radio in Canada*. New Star Books: p.22]

Image 01 Zapatistas participating in an autonomous radio communications
P.4 network in Caracol de la Morelia, Chiapas, Mexico
Raúl Fernando Pérez Lira, October 2017

[Source: <https://photocontest.smithsonianmag.com/photocontest/detail/zapatista-rebel-media/>]

Image 02 A *radiocicleta* in Bogota, Colombia
P.7 *Unknown photographer, unknown date*

[Source: <https://voceroscomunitarios.wordpress.com/la-radiocicleta/>]

Image 03 Balamii Radio headquarters in Peckham, London
P.9 *Paul Bröker [author], April 2016*

Image 04 Installing a pirate radio transmitter on a London rooftop
P.10 *Daniel James, unknown date*

[Source: Facebook]

Image 05 A t-shirt sold as part of Radio Alhara's Fil Mishmish campaign,
P.12 showing the global list of DJs and producers involved.

[Source: <https://everpress.com/filmishmish>]