

Booming at the Margins: Ethnic Radio, Intimacy, and Nonlinear Innovation in Media

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Pirate radio still flourishes in dense, multiethnic cities such as Brooklyn, New York, despite the rise of Web radio. For immigrants in particular, radio sounds mark identity and community and (re)claim social spaces of work, commutes, and the home. It is not only lack of access to digital technologies or broadband that shapes radio's relevance, but also marginalized communities' specific needs, histories, and values. Paying more attention to embodied social engagement with ethnic pirate radio illuminates key dynamics in how and when communities adapt or adopt new technology or integrate it into "old" technology. The power to make culture more autonomously is important for communities that exist in a hostile cultural environment that seeks to limit or shape their presence. Radio centers specific values unaccounted for in dominant discussions of radio: collective intimacy and synchronous listening, which help to produce that cultural autonomy.

Keywords: pirate radio, ethnic radio, diasporic media, digital divide, intimacy, listening

A website says "on air now" but has no radio call numbers listed. People dial a number on their nonsmart mobile phones and listen to a broadcast of a station from another country, using their mobile minutes. Some stations can only be found out about because cars pick them up suddenly when people drive through the right neighborhood, others' call numbers are only visible on posters attached to "dollar vans"—unofficial shared rides that drive fixed routes up and down major thoroughfares in predominantly immigrant neighborhoods, the posters advertising concerts of touring dancehall, soca, cumbia, or bachata bands. A Facebook page identifies itself as a "radio station" but broadcasts only online. Some stations provide phone numbers for live call-in or SMS messages to on-air broadcasters. Others provide only a Facebook page and a link to a streaming site. Although radio may be the last of traditional analog mass media to experience convergence (Anderson, 2013, p. 1), it is undeniably converging, but along different

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lines from those of other media formats. What does this mean for ethnic communities for whom radio has been particularly important? What are their desires for a radio experience, strong enough that they still pursue and create something they call "radio," including illegal broadcast radio, even in the Web radio era? What affordances do different radio and radio-like technologies have that allow them to pursue those desires? Audible radio can help marginalized people stay connected in intimate ways with their communities, and can allow people to negotiate and redefine the social meaning of shared physical space. Both community connection and redefinition of space are especially important aspects of cultural autonomy: an important aspiration for immigrant and diasporic communities facing an indifferent or hostile environment that pressures people to alter, mask, or reduce their cultural identities.

This article explores radio as a site of particular importance for immigrant and diasporic communities. Historically, radio has had a relatively low presence in media studies literature, especially given its reasonably long history and global reach. One aspect of radio's low profile may be due to being an "invisible medium" (Edmond, 2015, p. 1570) and an ephemeral one. Some of the more lasting traces of radio's social imprint are in formal and informal responses to it: Broadcasting and zoning policies allocate bandwidth and address sound in specific locations and times, whereas other media, from advertisements in print and poster form to online homepages and radio station social media accounts, provide traces of radio's reach. The lower amounts of physical media embodying radio do support the use of ethnographic and social-historical methods that attend to contexts for media engagement. Important work in that vein has highlighted how radio has been particularly important in defining local and ethnic identities. Vaillant (2002) describes how 1920s-1930s Chicago radio not only welcomed and affirmed certain ethnic groups, but also how its exclusion of most Black broadcasting and culture helped to affirm Whiteness as a marker of sonic acceptability. Although since that time licensed U.S. radio has narrowed sonic acceptability still further (due especially to media consolidation and standardization), many ethnic communities still use radio, with or without access to licenses. In fact, radio is the fastest-growing medium for reaching ethnic populations, especially Latinas/os, even as overall radio listenership declines: In 2010, nearly 70% of Latinas/os (up from 54% in 2005) and also 67% of African Americans (up from 56% in 2005) regularly listened to ethnic radio stations (Matsaganis, Katz, & Ball-Rokeach, 2010, p. 112). Perhaps for this reason, more recent years have seen an increase in scholarship on ethnic radio, especially Latina/o radio (see Casillas, 2014; Castañeda, 2014, 2016; Retis, 2016), which beautifully demonstrates the ways particular categories of radio stations have served specific community needs, including those affirmed in this article such as creating a sense of home for diasporic communities and asserting one's identity against a cultural context that is not always welcome. Enriched by and extending some of the points made in relation to particular listening communities, I here attend to the theoretical implications of radio usage across different ethnic communities. Specific ethnic communities clearly possess different cultures, histories, languages, and experiences. However, this article primarily generates theoretical insights into the features of radio practices that self-defined ethnic groups in Brooklyn, New York, claim for themselves. I identify dynamics particularly salient to understanding how communities underrepresented on mainstream media define their values, traditions, and practices; how they do this in changing technological environments; and how they innovate in the face of those changes. My goal is to illuminate values such as collective intimacy and practices such as synchronous listening that can help us understand how and when particular technologies are adopted, illuminating how material conditions, culture, and tradition affect a community's use and value of communication technologies.

Researching Multidimensional Media Practices

Ethnic communities engage with radio for many reasons. Two central ones are (1) building and maintaining social connections through listening and broadcasting and (2) negotiating relationships to one's physical location. In this article, I examine how people in the Kensington neighborhood of Brooklyn do both, especially seeking experiences of synchronous listening that produce collective intimacy. Collective intimacy is a valuable experience for communities that exist in a relatively hostile cultural landscape: It involves a willingness to sonically proclaim difference and be vulnerable (to other people) in that difference. The practice of synchronous listening is key to building that intimacy, as discussed further below. To explore the context in which these practices and conditions arise, I tracked Federal Communications Commission (FCC) enforcement (at <http://www.FCC.gov>), followed online amateur pirate radio buffs such as the Brooklyn Pirate Radio Scanner on Facebook and Twitter, walked around the neighborhood with a radio receiver, listened in taxis and car services, and researched the demographic realities of Kensington. I also investigated online radio stations identifiably serving ethnic communities in Brooklyn, surveying more than 30 websites stating Brooklyn locations, audible in Brooklyn, and the closer to Kensington the better. I focused on the social dynamics of radio listening in public, semipublic, and some private spaces.

Given that immigrants in the diaspora face particular challenges reaching their audiences and maintaining connections, they are often at the "leading edge of technology adoption" (Karim, 2003, p. 12). Web radio, a new technology in the first decades of the 21st century, must be considered against a dynamic sociotechnical field that includes older technologies (Dunbar-Hester, 2014, p. 162). Media users are not necessarily interested in using the newest technology (Oudshoorn & Pinch, 2003, p. 3): Their own interests and experiences shape technology choices. In relation to radio, Lopez's (2016) fascinating study of a Hmong community "radio" involving massive-scale mobile phone teleconferencing and my observation (discussed below) of "call-to-listen" technology (a mobile phone number that connects callers to radio broadcasts) exemplify how immigrant communities' technological innovations also do not follow a linear path toward "new" and away from "old" technologies. It is not surprising that they initiate creative approaches to broadcasting and listening. Ethnic communities that evoke or reuse radio broadcasting demonstrate that they value specific radio and radio-related media practices based in their own material and cultural contexts.

Ethnic or Diasporic Radio?

The term *ethnic* has been rightfully challenged as essentializing and compartmentalizing complex communities and identities having fluid and contested relationships to nations, languages, cultures, and regions. Regarding *ethnic media*, it is also unclear what is outside it: Nonethnic media is rarely defined. Importantly, "nonethnic" media could not include all White-created media (given that ethnic media include White-Latino-dominated telenovelas, Russian radio programming, etc.). Many business and government data sources use categories even less logical and more confusing: "Latino," "Hispanic," and "Asian" all conflate widely disparate experiences, communities, identities, and languages. Many U.S. ethnic media surveys include "Black media" categories, which neither account for "Black media" overlapping with other ethnicities nor differentiate between a person whose heritage is from enslaved Africans taken to Belize,

one whose heritage is from enslaved Africans taken to Alabama, or one who has just arrived from Senegal.

Some scholars use *diasporic media*, implying different communities and purposes than ethnic media (Echchaibi, 2002). *Ethnic* can be argued to be inward looking, away from broader society. *Diasporic* is outward looking, focused on movements and circuits of people, language, and culture (Naficy, 2003).

While taking on these critiques and dynamics, I use *ethnic radio* in my research here, using Matsaganis, Katz and Ball-Rokeach's (2010) definition "media created for (and generally by) immigrants, ethnic and language minority groups, and indigenous populations" (p. 5), understanding all of those categories primarily as relational. Hall's (1997) definition clarifies our understanding of ethnicity as "the necessary place or space" from which communities can articulate their own identities and stories in contradiction to dominant discourses (p. 184). Thus, ethnicity can have inward- and outward-looking dynamics. Although some ethnic radio may be more locally focused and others more transnational, even the most local ethnic groups still identify in ways that somewhat transcend current U.S. borders. Both the inward- and outward-looking aspects of ethnicity have implications for what we think people are doing when they engage with media. In the U.S. context, ethnic radio definitely reaches in both directions for reasons that are discussed further below.

U.S. Ethnic and Pirate Radio

Radio usage data are incomplete, because poor, mobile, and non-English-speaking communities are often undercounted, but in 2014 more than 94% of all "Hispanics" (a problematic term still widely used in radio research) over age 12 used radio every week, significantly higher than the rate for White non-"Hispanic" listeners (Nielsen Company, 2017). U.S. ethnic media also demonstrate strong links between people who travel outside the United States and or have relatives there. A significant amount of unlicensed (pirate) on-air broadcasting is made by and targeted to specific ethnic groups, and that number is similarly increasing. A recent report for the New York State Broadcasting Authority described how unlicensed stations, from just 2015 to 2016, saw a 58% increase from 12 to 29 in Brooklyn alone and estimated approximately 100 unlicensed stations in the New York area (Wallace & Drive, 2016). Although there are unlicensed broadcasters that are not tied to ethnic or linguistic minorities, there is a strong overlap between pirate radio and radio that serves otherwise underserved linguistic, ethnic, and cultural communities. Why do ethnic radio listeners continue to use on-air broadcasting to such an extent that illegal radio broadcasting is flourishing?

The most easily identifiable audience interest is for culturally specific content. The conglomerates owning the majority of the airwaves have standardized broadcasting, cutting back on local content, minority-language content, and content made by and aimed at ethnic communities. They are not disposed to serve "niche" audiences, especially if they are poor and not attractive to advertisers. A gap exists between the sounds of commercial radio and specific ethnic and linguistic minority communities (Finley, 2016).

The common, and reasonable, argument for why groups without economic clout turn to unlicensed broadcasting is lower barriers to entry: Radio transmitters are cheap to build or buy, whereas licenses are expensive (Iannelli, 2014). But why is on-air radio *in particular* necessary, especially as Web radio has become more available?

Broadcast radio's significance to ethnic communities is based in the histories and affordances of radio listening and broadcasting. Communities use radio to address specific cultural and informational needs, depending at least in part on their particular technological capabilities. As the Haitian example discussed below illustrates, some communities have a long history with radio that increases their desire to continue using it. Many accounts of ethnic radio describe the emotional and social value of people having shared, synchronous, geographically bounded social experiences. These needs and values inform the innovative and nonlinear approaches to radio engagement that incorporate new technology alongside old, or adapt existing technologies for new uses. Ongoing policy discussions about the digital divide would greatly benefit from a greater understanding of the motivations and values of people perceived as not fully embracing the digital era, as well as those who operate illegally or in legal gray areas. The popular and policy definition for people who are not using digital media is that they are on the wrong side of a "digital divide," whereas others are understood to be on the right side. Such framing identifies people or communities who use nondigital media as lacking something. But nonusers (or limited users) of digital media may find affirmative value in their choices (Wyatt, 2003, p. 74). Because digital media are mainly developed and concentrated in the hands of already-powerful social groups, it especially important to avoid conflating elite values with social value: A one-dimensional reading of media use prevents us from understanding the material and social power embodied in different media practices.

What Makes Kensington Receptive to Ethnic—and Pirate—Radio?

Kensington has a significant number of radio stations that are unrepresented by major networks, appear to be pirate, and operate in minority languages. The neighborhood possesses several characteristics that would make radio appealing for residents. Kensington is densely populated, in 2013 having almost double the population per square mile (67,423) of Brooklyn's average (34,917; "Kensington Neighborhood," n.d.), and an average household size almost double the New York average. Dense population makes broadcast radio attractive for two main reasons: The first is that one can reach more listeners more easily, in a smaller broadcast radius. But as well, the geographical connections between listeners may also reflect other shared characteristics that align these populations with radio listening.

Low income is one such shared characteristic. Kensington's median household income in 2016 was \$50,622 compared with New York City's \$62,909, and more than one quarter of Kensington residents lived below the poverty line, compared with 14.7% for New York City. As suggested earlier, Kensington also has low broadband access: A 2014 study found that "nearly half (47%) of households in Brooklyn Community District 12 (Borough Park, Kensington, and Ocean Parkway) lack broadband at home" compared with 11% of Manhattan households (Office of the Comptroller, City of New York, 2014, p. 2). Access outside the home does not appear common; Kensington does not have an Internet center where people could pay by the hour to use networked computers. As a consequence, Kensington's broadcasting needs are not likely to be met by Internet-based services.

Kensington also has a high percentage of people who speak a language other than English, including a relatively high percentage characterized as “speaking English not well or not at all” (“Kensington Neighborhood,” n.d.), more than double that of New York City: 16% compared with 7.3%. For such people, and for their bilingual or multilingual friends and family members, media programming in English may be less appealing than radio in their native language. Given that 43.7% of Kensington residents are born outside the United States (compared with 23% for New York City), their interests likely include information and culture not readily available on major media networks. Ethnicities in Kensington include Bangladeshi, Uzbek, Russian, Pakistani, Lithuanian, Mexican, Trinidadian, Haitian, Polish, Sudanese, Hassidic, and Orthodox Jewish. These ethnicities become sensorially evident in Kensington, depending on the time of day or season, according to which shifts, festivals, holidays, elections, or football matches are in effect. The yearly Potho Mela festival brings Bangladeshi pop performers to outdoor stages, flanked by rows of sari and jewelry sellers. Spanish-language radio content and music are audible on the street at times when day laborers congregate. In the buildup to the West Indian Day Parade, the Flatbush-bordering side of Kensington sprouts West Indian flags and speakers blast soca, dancehall, konpa, and more from cars and apartment windows, and more pirate stations spring to up to broadcast the latest Carnival tunes. Pirate broadcasts shift with the time of day, year, and week, but generally reflect this linguistic and cultural diversity. Sitting with the creator of the Brooklyn Pirate Radio Sound Map David Goren on a hot summer Sunday, we tuned his high-powered radio across 29 pirate FM stations, mainly Haitian, but also including two Hebrew-language and several Jamaican, Trinidadian, and Guyanese stations. On Sunday, gospel and other Christian programming were notable themes across many (but of course not all) of these stations. Several demographic and infrastructural realities described below illustrate why most licensed radio broadcasts do not provide the content Kensingtonians may be listening for, at the same time as it appears that Web radio cannot well meet their listening needs.

Ethnic Radio: Circulating Outside of Mainstream Media

Ethnic radio in New York depends on a transmedia network of cultural practices shaped especially by forces of law, technology, geography, and history that have continually pushed it toward unlicensed broadcasting.

Law

The FCC grants licenses, at a cost, to those who wish to broadcast. The major media conglomerates that dominate legal broadcasting have seen little value in minority-language or minority-culture audiences. As well, in the name of national security, broadcast licenses are restricted to U.S. citizens, which limits participation by immigrant communities. This increases the appeal of unlicensed broadcasting or pirate radio for ethnic communities. Pirate radio in the United States has included political, religious, and community/nonprofit programming, as well as music associated with communities that do not have the commercial clout or the listener base to attract advertisers and major media conglomerates.

Although FCC commissioner Michael O’Rielly bafflingly asserted in 2015 that “pirate radio does not increase media diversity” (para. 3), FCC regimes have not always been so dismissive: When the FCC previously expanded low-power FM (LPFM) radio (discussed below), diversity arguments clearly influenced

their decision. However, pirate radio represents a still more diverse set of languages, communities, cultures, and subcultures than any licensed on-air broadcast.

Of the estimated 100 pirate stations operating in the New York City area (Wallace & Drive, 2016), the Associated Press identified languages “from Hebrew to Gaelic to Spanish” (Finley, 2016). Not every station reflects small communities: Some apparently rebroadcast transmissions of Spanish-language global media conglomerates. Whether rebroadcasting Univision or giving airtime to a Haitian evangelical ministry, pirate stations are easily heard in Brooklyn and much of New York City, reaching neighborhoods interconnected by histories of immigration and diaspora. On another day, using an inexpensive handheld radio in Kensington, I counted at least eight identifiably pirate broadcasts on top of the 76 radio stations that are described by a station scanner as being likely audible in the area code 11218 (including Kensington; Theodric Technologies LLC, 2018). These were mainly Caribbean, of which five were playing music and two religious programming (one Haitian and one Anglophone Caribbean), and one Russian station, supporting a vision of ethnic broadcasting dominating unlicensed radio.

Ethnic broadcast radio’s presence does not preclude Web radio serving some of the same communities. Many ethnic Web radio stations have sprung up in recent years, including existing stations that moved online or added online services. Not every community uses Web or broadcast radio in the same way (comparative research on which communities are more or less online would be most welcome). Some features help explain why Web radio is not always the preferred choice for some communities. Web broadcasters who play music, for example, must pay copyright fees. The FCC has a two-tiered fee system with lower fees for noncommercial Net-only radio stations, but many ethnic radio stations are not noncommercial but locally commercial, and cannot afford the fees. Thus, online broadcasting’s legal, financial, and technological requirements do not outweigh the advantages of illegal on-air broadcasting for many, especially for music-centric broadcasting especially popular among many Caribbean listeners. But what if legal on-air broadcasting were made available? This possibility became real after a new campaign in 2012 to open up licenses for LPFM broadcasting.

The mid-2000s saw a coalition of activists urging the FCC to increase LPFM licenses, which are noncommercial and reach only a small geographic area. Broader access to the airwaves, the activists argued, would increase marginalized communities’ representation, widening and diversifying audiences. Many immigrant organizations and radio stations participated in the campaign, writing letters, testifying in hearings, and rallying support for LPFM (Dunbar-Hester, 2014; Wise, 2012). However, those licenses were made available only once, and their number was limited.

Other factors counter LPFM’s ability to serve ethnic communities that had been reliant on pirate radio. Stations previously identified as pirates could not apply, which blocked many committed broadcasters with established audiences. Citizenship, although not a 100% requirement, still had to be held by 80% of those applying for the license (Prometheus Radio, n.d.). The nonprofit category did not fit the small-scale financial interconnections that many local stations had with local businesses. LPFM licensing also requires formal accountability that is not familiar or easy to negotiate, and can open up marginalized communities to uncomfortable scrutiny. Although representation and participation are important, people whose culture is denigrated in mainstream media also need some measure of exclusive

control over spaces in which they celebrate their culture (Mann, 2016). Licensed spaces may not provide the kind of control necessary to foster collective intimacy. In New York, LPFM was functionally impossible anyway. A densely populated city has densely populated airwaves: Anti-interference regulation has allowed virtually no new legal broadcasting (Wallace & Drive, 2016). People broadcast anyway, but without licenses.

Technology

Ethnic radio stations associated with most marginalized communities have generally been unlicensed, using relatively cheap, low-power transmitters that reach small geographic regions. On the listener side, just as importantly, radios remain cheaply available. This fact has always underscored radio's democratic accessibility, unlike newer networked technologies. Although Web radio has lowered some barriers to a broadcast-like experience, accessibility has never been equally available to all, either for broadcasting or for listening. Class and race shape broadband and computer availability. More specifically, many sites where ethnic communities often listen to radio, such as workplaces and cars, often lack Internet connections. At the same time, in some cases, listeners are willing to go through an extra step to access broadcast radio programming.

One such extra step is the purchase of a specialized radio. In Kensington, local hardware and dollar stores sell various radios, including some labeled "transceivers" or "subcarriers." These are specialized radios that allow listeners to tune into broadcasts by small-scale stations that negotiate with a major broadcaster to "piggyback" on their frequency in such a way that only a specific kind of transmitter can pick it up: This is subcarrier frequency broadcasting. Although not a new technology (first tested in New York atop the Empire State Building in 1934; Hemphill, 2016), it has never been widespread, but has become popular in certain ethnic communities, especially Haitian broadcasters in the northeastern United States: Radio Soleil, one of the best-known Haitian stations, is one example (Pierre-Pierre, 1993). Subcarrier broadcasting works only if there is already an audience committed to listening to the radio and knowing the existence of the desired station. Another technology involves an extra step that some listeners do not mind making: Call-to-listen technology (patented by Washington, D.C.-based AudioNow) enables listeners to use a nonsmartphone mobile or land line to call a phone number and listen to a radio station. This also requires that callers know what stations they want to hear. Call-to-listen is advertised on about half of the 30 radio station websites I observed, including almost all Haitian stations. Both of these relatively recent expansions of radio across technology, like Hmong conference calling radio practices (Lopez, 2016), do not necessarily involve new technology, but instead adapt old ones in new ways.

Ethnic radio broadcasters engage with technologies available to them in multilayered ways, converging with and separating from new and older media forms. Of the New York ethnic radio websites I observed, about half showed frequency numbers (e.g., 97.1 FM) that at least referred to broadcasting. Some call numbers were not accurate: empty or more often occupied by another station. A few advertised transceivers for sale for subcarrier frequency listening, and, like Radio Soleil, also have incorporated Web streaming. In some cases, online stations also broadcasted on air, but did not advertise that fact to avoid the FCC's attention (Yee, 2013).

Although technological options for broadcasters and listeners are increasing, the proliferation of pirate radio, call-to-listen, and subcarrier frequency broadcasting all highlight how Web radio does not meet the needs of a substantial number of listeners belonging especially to immigrant and diasporic communities. Web radio is capable of much farther and wider reach than the geographically bounded broadcast radio, but a limited geographic radius does not necessarily limit a broadcast's value. In fact, limited reach can be positive.

Geography

The fact that easily available broadcast technologies are bound to local geographies might seem to contradict immigrants' needs given that geographic dispersal and the idea of "home" are both defining aspects of identity for diasporic communities (Georgiou, 2013; Karim, 2003). But the experience of being in one place as someone from another place is in itself an aspect of identity. Immigrant communities look to radio both to stay connected across distance and to stay connected with each other within the geographic region in which they live. Diasporic experiences are simultaneously networked and hyperlocal, especially when economic and cultural dynamics tend to segregate immigrants into neighborhoods: Text and images on posters, signs, and retail products, culturally specific foods on occasion also mark locations by smell; Bengali signs and posters adorn shops and telephone poles at the intersection of Church Avenue and McDonald Avenue in Kensington, sometimes called "Bangla Town." Other blocks display West Indian flags and feature Jamaican patties or Trinidadian roti in shops decorated with posters for Caribbean music shows; or Uzbek barbeque and Russian-language pharmacies evoke local communities. Music or other radio broadcasts also echo from apartments, shops, cars, or occasionally handheld radios on the street: Sound as well as smell and sight assert individual and community tastes, histories, and identities in shared space with others.

Ethnic radio does not only affirm, but also can assist in redefining identity, also shaped by the social geography of a locale. The example of Russian radio, although sketchy, is suggestive. Not much information is available about Russian radio in Brooklyn; however, some research asserts it has been "ubiquitous" since the 1990s (Laitin, 2004, p. 18). However, in 2009, there was only one licensed Russian-language radio station in the New York metropolitan area (Courthouse News Service, 2009). It is likely that pirate radio stations account for the rest. Laitin (2004) points out that social segregation has put Russian-speaking immigrants in close geographical proximity, while also sorting them into different communities than they may have been in in the originating countries; for example, Russian Jews are more likely to live in more homogeneously Russian-Jewish neighborhoods than they might have before they came to the United States. To the extent that Russian-language radio targets geographically limited areas, it is likely shaping and shaped by these new identities.

In much of New York, immigrant populations, low incomes, and low Internet connectivity overlap significantly in particular, which increases radio's potential usefulness there. Geographically limited low-power broadcasts are not, in this case, necessarily less connected than Web radio. Alongside creating new, geographically bounded identities (as the Russian case might suggest), local broadcasts also can strengthen existing identities, facilitating multifaceted interconnections between members of diasporic communities concentrated in a particular locale. Those interconnections serve important social functions. As Jay Blessed, a Brooklyn-based Trinidadian blogger and radio personality, put it (regarding Caribbean

pirate radio), "Radio can't be replaced in this community. It makes them feel home" (Jeffries, 2013, para. 12). Although this sense of home for diasporic people is in some ways performative (a "way of life . . . which makes one's home while in movement"; Morley, 2002, p. 47), this movement often occurs in neighborhoods, blocks, or even smaller physical locations, physically—if ephemerally—asserted through a radio broadcast from a speaker. Sound asserts one's "home" in the physical location where the speaker itself is playing, shaping how people experience local spaces as simultaneously diasporic (Baum, 2006).

As the local intertwines with the global, so does the online intertwine with the offline in the daily experience of networks of cultural engagement. Sites where people live, work, and commute facilitate significant offline communication within a diasporic community. Events advertised on pirate radio are also visible on posters in the neighborhoods where their listeners live and work. Posters mark local businesses: barber shops, nail salons, and corner stores, as well as the informally operated dollar vans that cheaply shuttle commuters up and down Ocean and Utica Avenues. Even in the social media era, many of these events are not well advertised online. To keep up with who is coming to town from Haiti, Dominican Republic, Jamaica, or Trinidad, one must go to the neighborhood where people from those communities live, tune into a (usually unlicensed) station broadcasting local music, or check out the posters on the streets. Keeping cultural knowledge primarily available through geographical and temporal proximity to communities that make that culture puts outsiders at some informational disadvantage, facing a higher cost for learning about these events. Restricting how culture, information, and economic resources circulate can strengthen community ties, and reduce their dependence on outside systems of support that may be unreliable or require concessions in exchange. Being somewhat exclusive about this knowledge can help communities maintain a level of control over how and when nonmembers participate. This control supports more autonomous cultural expression, especially necessary when the terms of inclusion in a larger media system are not neutral.

Another aspect of autonomy arises from radio's relationships to local businesses that serve specific needs of that community. Here, too, geographic limitations can be advantages for a business that wants to reach its neighbors. Kensington pirate stations democratize access to resources within specific communities. Jason Benn (a soca singer and promoter of Trinidadian origin living in New York since the 1980s) explained that pirate radio stations "allow the average man to have a curry-cue or barbeque at Frankie's and advertise it for \$300 dollars . . . and 200 people will come out" (Nath, 2013, para. 14). Such low-level financial interconnections keep money in local communities and tie money's circulation to the circulation of more intimate knowledge of one's neighbors.

These neighborly interrelationships are also used for nonprofit purposes. Charles Clemons Muhammad, speaking on the importance of his unlicensed radio station that serves Black communities in Boston, described how it worked:

When someone needed their rent paid, we would raise money to pay that person's rent.
When someone lost their child, we would put out our own alert. If a grandmother with Alzheimer's was lost, we would find her. We would put that bulletin out over the air.
When someone had a funeral and couldn't pay for it, we would raise the money.
(InsideRadio, 2017, para. 21)

Although not every station is involved in these nonprofit practices, many interconnect with local communities on a material level.

As mentioned above, the material realities of employment mean that diasporic hyperlocalities also include networks of commuting and workplaces that may be more or less amenable to different media practices. Immigrants who are not wealthy often work in trades where radio is often more easily accessible: kitchens, yards/construction work, and cars (taxi and delivery). Kensington has almost double the percentage of workers in transportation occupations (11.9%) compared with New York's average (6.5%; "Kensington Neighborhood," n.d.). Listening to the radio in one's home language while at work can claim that space (in which they may not otherwise have much autonomy) for their own, in the moment, filling the space with sounds. Radio playing reshapes the feel of a specific location through these sonic occupations of space-in-time. Because many minority cultures are not welcomed or celebrated in mainstream media or in elite environments, listening to broadcast radio is a more portable and cheap way to claim space for one's own community and identity, even temporarily. This reclamation pushes against other readings of these spaces as sites of service or exploitation, but also positively redraws spaces as nodes in a diasporic network (Georgiou & Silverstone, 2007, p. 37). The synchronous experience of listening and playing radio at a particular moment in time, with others, enhances the ability to reclaim space: Without synchronous listening, the collective experience of radio would be lessened.

History

Desires for broadcast radio have been shaped by shared histories with radio. Especially outside the United States and the Global North, radio listening has often been a collective practice (Gunner et al., 2012), with radios commonly found in public places where people gather to listen together (Bronfman, 2013, p. 151; Mano, 2012; Myers, 2009). These historical contexts shaped the expectations different audiences have had of radio and the different needs they brought to it. Crucial for understanding radio in immigrant communities, people bring these expectations with them.

Haiti, for example, has a deep radio tradition: "In Haiti, a peasant may not wear shoes, but he has a transistor radio" (Pierre-Pierre, 1993, para. 10), said Raymond Cajuste, a filmmaker who teaches at City College in Manhattan and is the host of a show on Radio Tropicale. "He makes a conscious decision to buy the radio" (Pierre-Pierre, 1993, para. 10). This may help explain why Haitians are so present in New York pirate, subcarrier frequency radio, and call-to-listen: Haitian radio users' social, collective listening practices draw on their shared history.

Strengthening Diasporic Cultures

These social and collective practices help explain the mechanism that makes media especially important for ethnic, linguistic, and religious minorities who "seek to maintain a sense of community or collective identity within a dominant culture" (Lopez, 2016, p. 2041; also see Dhoest, Cola, Brusa, & Lemish, 2012; Downing, 1990). In relation to illegal broadcasts in New York, Jason Benn (of Trinidad) said "[pirate] stations reinforce these identities that otherwise would be lost" (Nath, 2013, para. 2). Another Trinidadian, Jay Blessed described radio as "an important part of our culture. I grew up listening with my

grandfather with his radio by his ear. If we can't hear ourselves on the radio, then we feel ostracized" (Jeffries, 2013, para. 6).

At the same time, the extent to which listeners imagine themselves as part of a listening community is bounded by social and cultural position. For ethnic radio, feelings of exclusion and the power to exclude others may matter as much as inclusion. Listening publicly or, as Casillas (2015) puts it, "loudly" extends the act beyond a single listener and can require listeners to take sides: "in the face of anti-immigrant public sentiment" such loud listening "becomes a form of radical self-love, a sonic eff-you, and a means of taking up uninvited (white) space" (para. 2). Listeners' preexisting knowledge and associations shape broadcasts' sonic significance. If the language is not intelligible, or the music sounds unfamiliar or connotes communities a listener does not know, fears, or dislikes (Stoeber, 2010; Vargas, 2014), it may divide listeners: Iannelli (2014) points out that "to the layperson driving around Brooklyn, the static amounts to little more than white noise, but for the members of New York's sizeable Haitian diaspora, stations like *Radyo Independans* . . . represent the sound of home" (para. 2). This is not necessarily a failure of the medium, especially considering that marginalized communities in the United States may need spaces—sonically but also physically—in which they feel safe, affirming their identity. Oscar Paul, a 27-year-old Haitian radio listener living in Flatbush (neighboring Kensington), explicitly distinguished radio listening from American habits: "I have my American habits, but I want the information that is on Haitian radio" (quoted in Pierre-Pierre, 1993, para. 21). The social inequality that excludes Haitian content and practices from legal radio also can create vulnerability for Haitian listeners that benefits from some control over their listening practices.

That control is strengthened by the experience of collective listening at the same time, reinforced by visible presence in geographically distinct neighborhoods or shared physical occupation of the street or workspaces.

Conclusion: Claiming Space, Listening Together in Shared Intimacy

All sonic aspects of a broadcast have cultural significance, from the language, tones, and rhythms of spoken voices, musical genre, content of lyrics, and conversation. Among certain communities, playing music (in particular) in a way that can be heard by many is an expression of culture and community in itself, calling on older traditions of audible public culture (Jaffe, 2012, p. 83; McAlister, 2012, p. 25; Oosterbaan, 2009).

The history and social spaces of ethnic radio facilitate collective listening, as well as personalized or individual listening. Recentring radio practices on diasporic communities reveals how "radio sounds cut through social spaces, demarcate them, and create new networks through such tracks of sound and sociabilities" (Gunner et al., 2012, p. 12). Radio not only has the ability to "tap into the cultural fabric of the society to which it broadcasts" (Mano, 2012, p. 116), but playing the radio for a shared listening audience can reknit the cultural fabric of a particular location for the duration that its sound occupies the space and is affirmed in the bodies of listeners. Listening to the radio in one's home language while at work can claim this space (in which one may not have so much autonomy or respect otherwise) for one's own—more powerfully when other community members listen and respond physically, in time, together,

and building a dialogic relationship with one's community though discussing what they hear (Félix, González, & Ramírez, 2008).

Some of radio's emotional effects are suggested to derive from the knowledge that one is listening to something happening in real time. Although not necessarily dependent on a broadcast's liveness, a crucial element is the copresence of listeners in the act of listening at the same time as others. To respond in sync with others, thinking, exclaiming, commenting, or dancing builds a commonality of feeling among those responding. This shared experience knits people together socially and emotionally, making identity negotiation a collective as well as an individual process, strengthened by seeing shared experience affirmed. Affirming a shared synchronous experience happens by seeing, feeling, or hearing others' responses, as when a chorus of screams and horn honking echoes through open windows in a particular neighborhood after a World Cup soccer victory, or when people are dancing or listening together to music (Mann, 2015).

This synchronous experience can generate intimacy between all who are sharing responses at the same time, and often sharing feelings as well. For communities that want to "overcome social and cultural exclusion through the process of identity negotiation" (Olga, Bart, & Nico, 2007, p. 64), such an experience is especially important. Such identity negotiation is not, of course, neutral. But it is a priority, especially for marginalized communities (Pham, 2013).

The social context of radio listening for ethnic communities in Brooklyn suggests it is worth reexamining one of radio's most commonly asserted characteristics: intimacy. Many North American and UK radio theorists have asserted that "most radio listening is an individual act" (Chignell, 2009, p. 85) or "a private experience" (McLuhan, 1994, p. 299). Within the United States, Canada, and the United Kingdom, many scholars argue that intimacy derives from radio's positioning as an everyday experience, especially within the home, in a living room with one's family, later in the bedroom, and in the (personal-use) car (Douglas, 2004, p. 5). This understanding of intimacy is fairly individualistic, and also centers the domestic life of a nuclear family. It frequently presumes White citizenship and perhaps middle-class American life. When technologies changed, many scholars assert that personal transistor radios and increasing music programming contributed to "more private individualistic ways in which many were now listening" (Douglas, 2004, p. 221). But is this individualistic experience of radio a defining feature for all listeners?

When radio scholars have addressed how radio broadcasts aim to, and often do, unite listeners collectively, this collectivity is often paradoxically framed in terms of individuals. One often-quoted phrase from the English scholar Peter Lewis (2000) is "Radio is everybody's private possession, yet no one recognizes it in public" (p. 61). Vaillant's (2002) discussion of "the sound of Whiteness" does complicate this individualistic view from within the United States. Not coincidentally, Vaillant focuses on ethnic radio, which, although excluding Black broadcasting, still targets ethnicities less audible on mainstream radio today, suggesting that ethnic listeners' collectively defined needs may be less well served by mainstream radio. More recent scholarship on Latino/a radio also suggests that radio desires may be tied to ethnic community interests (see Casillas, 2014, and others discussed above). In many cases, the experience of radio is not necessarily based in nuclear-family-style domesticity, but instead in listening collectively at

work or other shared social spaces. What do these other, collective engagements with radio mean for intimacy? Can there be a kind of intimacy that is collective and community based, as well as personal and bodily? In a discussion of disabled voices on the radio, Kirkpatrick (2013) discusses "interpersonal interpenetration" having "connotations of privacy, personal space, dialogue, privileged self-revelation, affinity and domesticity, not to mention love, passion and sexuality" (p. 117). All are relevant to radio listening, but it is also useful to consider vulnerability, a connotation strikingly absent from this list. Intimacy resides partly in the choice to reveal something that could make one vulnerable, often because it is something central to one's identity (whether it is a person's body, immigration status, religion, or mother tongue). Radio DJs may not be vulnerable to listeners, but listeners may experience a kind of vulnerability based on listening. That vulnerability is not necessarily a concern for the broadcaster, who may not be able to respond to listeners individually, but is felt in relation to other listeners.

Social relations between audiences are central to cultural intimacy, especially in an unequal society. Radio in the era of increasingly global media networks is "still a medium of local specificity and intimacy, *but* [emphasis added] defining its audience not through geography but through cultural affinity" (Loviglio & Hilmes, 2013, p. 2). Contrasting cultural affinity and local intimacy presumes culture separate from the individual. By contrast, for people who are part of communities denigrated or disrespected by mainstream society, culture is an important aspect of individual identity, a way of shoring up one's sense of self against the hostility faced in public life. Simply revealing aspects of identity that designate someone an "outsider" is a potentially intimate act, for one becomes vulnerable not only to policing, profiling, losing one's job, or being expelled from one's family, but also to mockery, derision, and fetishization/objectification of those very aspects. If language, gender identity, ethnicity, or body is a vector of discrimination or danger for a person in the wider world, then sharing that aspect of oneself with others is potentially intimate.

In that context, listening to one's own language on the radio, in a place where others can hear, creates intimacy with others who are in similar positions. This is true even as (and perhaps because) that sound can generate distance or even hostility from those who find it alien or threatening. The synchronous nature of radio listening enhances cultural intimacy because its aural nature means that radio enters the body via sound waves touching eardrums, but also that radio resides in the space between people, touching all simultaneously. Breathing or singing in time, responding in time with others, builds physical and social connections with those who respond similarly. This capacity for cultural intimacy comes from the confluence of cultural and technological affordances of radio broadcasting, and helps to explain radio's continuing popularity especially among ethnic and linguistic minorities and immigrants in the United States. The value of these nonlinear paths of adapting, adopting, and blending media technologies for media scholars and policymakers is that they are moves toward more autonomous culture-making in the face of indifferent or hostile media industries. They are not only fugitive or marginal, they are the seeds of different and more autonomous engagement with media and with the world.

References

- Anderson, J. N. (2013). *Radio's digital dilemma: Broadcasting in the twenty-first century*. London, UK: Routledge.
- Baum, D. (2006, October 23). *Arriba! A Latino radio scold gets out the vote*. Retrieved from <https://www.newyorker.com/magazine/2006/10/23/arriba>
- Bronfman, A. (2013). El octopus acústico: Broadcasting and empire in the Caribbean. In M. Hilmes & J. Loviglio (Eds.), *Radio's new wave: Global sound in the digital era* (pp. 147–162). London, UK: Taylor & Francis.
- Casillas, D. I. (2014). *Sounds of belonging: U.S. Spanish-language radio and public advocacy*. New York, NY: New York University Press.
- Casillas, D. I. (2015, July 20). *Listening (loudly) to Spanish-language radio*. Retrieved from <https://soundstudiesblog.com/2015/07/20/listening-loudly-to-spanish-language-radio/>
- Castañeda, M. (2014). The role of media policy in shaping the U.S. Latino radio industry. In A. Davila & Y. Rivero (Eds.), *Contemporary Latina/o media: Production, circulation, politics* (pp. 186–205). New York, NY: New York University Press.
- Castañeda, M. (2016). Altering the U.S. Soundscape through Latina/o community radio. In D. I. Casillas & M. E. Cepeda (Eds.), *The Routledge companion to Latina/o media* (pp. 110–122). New York, NY: Routledge.
- Chignell, H. (2009). *Key concepts in radio studies*. London, UK: SAGE Publications.
- Courthouse News Service. (2009, September 4). *Russian radio station seeks to stop pirate*. Retrieved from <https://www.courthousenews.com/russian-radio-station-seeks-to-stop-pirate/>
- Dhoest, A., Cola, M., Brusa, M. M., & Lemish, D. (2012). Studying ethnic minorities' media uses: Comparative conceptual and methodological reflections. *Communication, Culture & Critique*, 5(3), 372–391. <https://doi.org/10.1111/j.1753-9137.2012.01124.x>
- Douglas, S. J. (2004). *Listening in: Radio and the American imagination*. Minneapolis, MN: University of Minnesota Press.
- Downing, J. D. (1990). Ethnic minority radio in the United States. *Howard Journal of Communications*, 2(2), 135–148. <https://doi.org/10.1080/10646179009359709>
- Dunbar-Hester, C. (2014). *Low power to the people: Pirates, protest, and politics in FM radio activism*. Cambridge, MA: MIT Press.

- Echchaibi, N. (2002). (Be)longing media: Minority radio between cultural retention and renewal. *Javnost—The Public*, 9(1), 37–50. <https://doi.org/10.1080/13183222.2002.11008792>
- Edmond, M. (2015). All platforms considered: Contemporary radio and transmedia engagement. *New Media & Society*, 17(9), 1566–1582. <https://doi.org/10.1177/1461444814530245>
- Félix, A., González, C., & Ramírez, R. (2008). Political protest, ethnic media, and Latino naturalization. *American Behavioral Scientist*, 52(4), 618–634. <https://doi.org/10.1177/0002764208324611>
- Finley, B. (2016, April 27). *In Internet age, pirate radio arises as surprising challenge*. Retrieved from <https://apnews.com/4c775aacfa9244c2895316a50c827245/internet-age-pirate-radio-arises-surprising-adversary>
- Georgiou, M. (2013). Diaspora in the digital era: Minorities and media representation. *Journal on Ethnopolitics and Minority Issues in Europe*, 12(4), 80–99.
- Georgiou, M., & Silverstone, R. (2007). Diasporas and contra-flows beyond nation-centrism. In D. K. Thussu (Ed.), *Media on the move: Global flow and contra-flow* (pp. 30–44). London, UK: Routledge.
- Goren, D. (2018, July). Brooklyn pirate radio sound map. Retrieved from <https://www.pirateradiomap.com/home>
- Gunner, L., Ligaga, D., & Moyo, D. (2012). Introduction: The soundscapes of radio in Africa. In L. Gunner, D. Ligaga, & D. Moyo (Eds.), *Radio in Africa: Publics, cultures, communities* (pp. 1–16). Johannesburg, South Africa: Wits University Press.
- Hall, S. (1997). The local and the global: Globalization and ethnicity. In A. McClintock, A. Mufti, & E. Shohat (Eds.), *Dangerous liaisons: Gender, nation, and postcolonial perspectives* (pp. 173–187). Minneapolis: University of Minnesota Press.
- Hemphill, S. (2016, February 15). *The first use of FM multiplex subcarriers*. Retrieved from <http://www.radioworld.com/columns-and-views/0004/the-first-use-of-fm-multiplex-subcarriers/338754>
- Iannelli, J. (2014, October 19). *As tech costs decline, Haitian pirate radio thrives*. Retrieved from <http://globalcitynyc.com/2014/10/19/as-tech-costs-decline-haitian-pirateradio-thrives/>
- InsideRadio. (2017, May 22). *Q&A with a "radio pirate": "We're the Rosa Parks of radio."* Retrieved from http://www.insideradio.com/q-a-with-a-radio-pirate-we-re-the-rosa/article_1d18f0d6-3ecc-11e7-bfd2-bf7bca309171.html

- Jaffe, R. (2012). The popular culture of illegality: Crime and the politics of aesthetics in urban Jamaica. *Anthropological Quarterly*, 85(1), 79–102. <https://doi.org/10.1353/anq.2012.0010>
- Jeffries, A. (2013, July 23). *As police crack down on pirate radio, broadcasters resist the move online*. Retrieved from <https://www.theverge.com/2013/7/23/4548878/pirate-radio-dies-hard-in-brooklyn-and-the-bronx>
- Karim, K. H. (2003). *The media of diaspora: Mapping the globe*. London, UK: Routledge.
- Kensington neighborhood in Brooklyn, New York (NY), 11218, 11230 detailed profile. (n.d.). Retrieved from <http://www.city-data.com/neighborhood/Kensington-Brooklyn-NY.html>
- Kirkpatrick, B. (2013). Voices made for print: Crip voices on the radio. In J. Loviglio & M. Hilmes (Eds.), *Radio's new wave: Global sound in the digital era* (pp. 106–125). New York, NY: Taylor & Francis.
- Laitin, D. D. (2004). The de-cosmopolitanization of the Russian diaspora: A view from Brooklyn in the “far abroad.” *Diaspora: A Journal of Transnational Studies*, 13(1), 5–35. <https://doi.org/10.1353/dsp.2006.0006>
- Lewis, P. (2000). Private passion, public neglect: The cultural status of radio. *International Journal of Cultural Studies*, 3(2), 160–167.
- Lopez, L. K. (2016). Mobile phones as participatory radio: Developing Hmong mass communication in the diaspora. *International Journal of Communication*, 10, 2038–2055.
- Loviglio, J., & Hilmes, M. (2013). *Radio's new wave: Global sound in the digital era*. New York, NY: Taylor & Francis.
- Mann, L. K. (2015). Embodied meaning in Jamaican popular music. *Journal of Popular Music Studies*, 27(4), 478–487.
- Mann, L. K. (2016). White faces in intimate spaces: Jamaican popular music in global circulation. *Communication, Culture & Critique*, 9(2), 266–283.
- Mano, W. (2012). Why radio is Africa's medium of choice in the global age. In L. Gunner, D. Ligaga, & D. Moyo (Eds.), *Radio in Africa: Publics, cultures, communities* (pp. 102–116). Johannesburg, South Africa: Wits University Press.
- Matsaganis, M. D., Katz, V. S., & Ball-Rokeach, S. J. (2010). *Understanding ethnic media: Producers, consumers, and societies*. London, UK: SAGE Publications.

- McAlister, E. (2012). Listening for geographies: Music as sonic compass pointing toward African and Christian diasporic horizons in the Caribbean. *Black Music Research Journal*, 32(2), 25–50. <https://doi.org/10.5406/blacmusiresej.32.2.0025>
- McLuhan, M. (1994). *Understanding media: The extensions of man*. Cambridge, MA: MIT Press.
- Morley, D. (2002). *Home territories: Media, mobility and identity*. London, UK: Routledge.
- Myers, M. (2009). *Radio and development in Africa: A concept paper*. Retrieved from <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/41180/129100.pdf?sequence=1>
- Naficy, H. (2003). Narrowcasting in diaspora: Middle Eastern television in Los Angeles. In K. H. Karim (Ed.), *The media of diaspora: Mapping the globe* (pp. 51–62). New York, NY: Routledge.
- Nath, R. (2013, November 7). *Show me some signal: Caribbean pirate radio in New York City*. Retrieved from <http://daily.redbullmusicacademy.com/2013/07/new-york-pirate-radio-feature>
- Nielsen Company. (2017). *State of the media: Ethnic audio today*. Retrieved from <http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2017-reports/aug-ethnic-audio-today.pdf>
- Office of the Comptroller, City of New York. (2014). *Internet inequality: Broadband access in NYC*. Retrieved from https://comptroller.nyc.gov/wp-content/uploads/documents/Internet_Inequality.pdf
- Olga, B., Bart, C., & Nico, C. (2007). *Understanding alternative media*. Maidenhead, Berkshire, UK: McGraw-Hill Education.
- Oosterbaan, M. (2009). Sonic supremacy: Sound, space and charisma in a favela in Rio de Janeiro. *Critique of Anthropology*, 29(1), 81–104. <https://doi.org/10.1177/0308275X08101028>
- O’Rielly, M. (2015, April 8). Consider a new way to combat pirate radio stations. Retrieved from <https://www.fcc.gov/news-events/blog/2015/04/08/consider-new-way-combat-pirate-radio-stations>
- Oudshoorn, N., & Pinch, T. (2003). *How users matter: The co-construction of users and technology*. Cambridge, MA: MIT Press.
- Pham, M.-H. T. (2013). Listening as a labor of love: Commerce, community, and little Saigon radio. *Positions: East Asia Cultures Critique*, 21(4), 987–1018. <https://doi.org/10.1215/10679847-2346068>

- Pierre-Pierre, G. (1993, August 20). For Haitian immigrants, radio remains a passion. *The New York Times*. Retrieved from <http://www.nytimes.com/1993/08/20/nyregion/for-haitian-immigrants-radio-remains-a-passion.html>
- Prometheus Radio. (n.d.). FCC requirements for LPFM licensees: Board of directors. Retrieved from <https://www.prometheusradio.org/boardrequirements>
- Retis, J. (2016). The transnational restructuring of communication and consumption practices: Latinos in the urban settings of global cities. In D. I. Casillas & M. E. Cepeda (Eds.), *The Routledge companion to Latina/o media* (pp. 22–36). New York, NY: Routledge.
- Stoever, J. L. (2010, August 19). The noise of SB 1070: Or do I sound illegal to you? Retrieved from <https://soundstudiesblog.com/2010/08/19/the-noise-of-sb-1070/>
- Theodric Technologies LLC. (2018). Radio stations in 11218 [Search engine]. Retrieved from <https://radio-locator.com/cgi-bin/locate?select=city&city=11218&state=NY&x=15&y=4>
- Vaillant, D. W. (2002). Sounds of Whiteness: Local radio, racial formation, and public culture in Chicago, 1921–1935. *American Quarterly*, 54(1), 25–66. <https://doi.org/10.1353/aq.2002.0009>
- Vargas, D. R. (2014). Ruminations on Lo Sucio as a Latino queer analytic. *American Quarterly*, 66(3), 715–726. <https://doi.org/10.1353/aq.2014.0046>
- Wallace, D., & Drive, S. (2016, May 19). *Field measurements of unauthorized FM band radio signals in New York, NY Metropolitan Area* (Field test report). New York, NY: New York State Broadcasters Association. Retrieved from <https://nysbroadcasters.org/wp-content/uploads/2018/03/Pirates-MSW-2016-study-final-pdf.pdf>
- Wise, J. (2012). *FCC expands media diversity by empowering community groups to launch and operate low-power local radio stations*. Washington, DC: Federal Communications Commission. Retrieved from <https://www.fcc.gov/document/fcc-adopts-rules-expand-low-power-radio-service/attachment>
- Wyatt, S. M. E. (2003). Non-users also matter: The construction of users and non-users of the Internet. In N. Oudshoorn & T. Pinch (Eds.), *How users matter: The co-construction of users and technology* (pp. 67–79). Cambridge, MA: MIT Press.
- Yee, V. (2013, July 4). Station had listeners, just not a license. *The New York Times*. Retrieved from <http://www.nytimes.com/2013/07/05/nyregion/radio-pirates-of-the-caribbean-no-less-are-pulled-off-the-air.html>