Radio sound

The field of radio studies has expanded considerably over the last two decades, building on an uneven academic engagement with the century-long history of the medium. This renaissance of radio studies has paralleled the expansion in the new field of sound studies, and the two areas have produced some mutually beneficial insights. This chapter seeks to set out the productive ways that radio has and can be studied in terms of the medium's existence as encultured sound. By this I mean understanding radio as the product of distinct national cultures at particular historical moments.

Contributing to a volume on sound studies provides an ideal opportunity to work through how we can best study radio by drawing on the fresh approaches developed within sound studies to overcome the conceptual limitations that have arisen within radio studies and use discussions of radio to rethink the confining assumptions that have emerged sound studies. The approach set out here bridges questions about the history of radio and the shifts in production practice organisation and regulatory policy, questions about the nature of specific radio texts and those about the way we listen to and experience radio as meaningful sound. I start with a critique of some of the existing approaches to understanding radio as sound, establish the historically-located development of radio within the US and UK as exemplars of national radio, explore radio's dominant form and set out some ideas for grappling with radio listening as a cultural practice.

Blind-alley analysis and intellectual knot-tying in radio studies

Book-length studies of radio usually start by riffing on the idea of radio as a sound medium; often in terms of limitation or absence. Crisell (1986), for instance, states that "in radio all the signs are auditory: they consist simply of noises and silence and therefore use *time*, not space" (43). For both (Crisell 1986, 3) and Chignell (2009, 4) radio is 'blind', and for Lewis and Booth (1989) it is an 'invisible medium'. The need to engage a visual imagination when listening to radio is commonplace (see, for instance, (McWhinnie 1959, 21, McLeish 1978, 70). However, metaphors from our physical world take us down (forgive the pun) a number of blind alleys. It is hard to sustain the argument that the meaning or significance of radio is to be found primarily in some essence of its form, or in the minds of its listeners, however rhetorically enticing those ideas are.

We need an approach that integrates understanding radio's form and the experience of consuming it. Film and television, of course, use time as a structuring device just as much as radio and the very mobility of sound media demonstrate that consuming radio is an even more spatial experience than watching video. Jody Berland (1993) has pointed to the distinctive forms of radio time and space. Further, radio does not operate on its limitations as an audio medium, but in terms of its strengths at presenting music and the spoken word and the ease with which it can be made available over long distances. Using our inability to see radio programming as a starting point for understanding radio sound seems at best irrelevant and, while it is obviously true that we do not see radio, the recognition does not mean radio is (literally or metaphorically) invisible, nor its listeners blind.

There is a case to be made for greater attention to radio within media studies and for its place in sound studies. When television replaced radio as the main domestic medium academics somehow lost track of radio, even though this was the very moment it became ubiquitous in our social world. Radio's pervasive presence in everyday life demands more analysis, not less. Worries about television's political and moral influence, debates about state policy and legislation and even discussions of cultural value, construct radio as a less significant medium. Sound studies, with its emphasis on the listening experience and the social-pervasiveness of sound, provides productive frames through which to understand radio.

The foundational work of radio studies, edited by Lazarsfeld and Stanton (1944), focused on social effects and regulation and established media studies as a discipline, but as the future of television increasingly dominated national policy debates and the new medium came to be perceived as the most influential, radio studies was relegated to a second division of media studies, reinforced by the contention that radio is a secondary medium. Understanding radio as a means through which other textual forms – music, speech or advertising – are consumed, or that radio consumption is undertaken while doing something else (getting up, travelling to work, cooking tea), should point us not to the marginal nature of the medium, but rather to the centrality of radio within complex media systems and its integration into everyday life.

An emphasis on radio can also contribute to developing sound studies beyond its own current limitations. Radio provides a longer history to forms of mobile listening ignored in the emphasis on new technology, and ideas of audience in radio studies enable us to explore the ways in which the listening subject can imagine themselves as part of a wider community of listeners that recontextualise work on the privatisation of sound worlds. Most importantly, radio points to the way different sound media have distinctive institutional forms, listening regimes and national characteristics.

The most unhelpful trajectory in radio studies has been an aspiration to produce a general theory of radio by isolating the essential qualities of radio. For Crisell, for instance, radio's use of sound leads him to propose that "sound is a 'natural' form of signification which exists 'out there' in the real world" and works indexically, linked to the way that sounds alert us to other physical occurrences in the real world (Crisell 1986, 43). However, radio sound is an exemplar of human invention, always mediates sound from the real world, and even the most indexical of radio sounds are not usually what they seem. Its artifice is what makes it endlessly interesting. The conventions developed over radio's history, and organised in the distinctively different national institutional form radio has taken, can only be understood with attention to the sophisticated processes of construction the medium relies on. The essentialist ideas introduced thirty years ago are still routinely set out un-interrogated in recent student textbooks (see, for instance, Crook 2012).

This essentialist misrecognition of how sound works in radio is itself rooted in a privileging of certain forms of radio sound that are marginal within the institutionalisation of radio broadcasting itself. By drawing from observations about radio talk, radio drama or even experimental forms of sound, rather than the dominant forms of music radio, authors often propose that the complexity of radio's meaning as sound can be reduced to the sound of the spoken word; that speech is radio's primary

code. Crisell makes the best case for the idea on the basis that in radio the spoken word "contextualizes all other codes" (1986, 54). Radio talk does anchor meanings, of course, and even music radio has retained presenter talk as a vital part of its form. This leads, though, to assertions about "the virtual absence of meaning in music" (Crisell 1986, 49), or the reduction of music's role to jingles, signature tunes and incidental music (Shingler and Wieringa 1998, 61-72). Given how pervasive recorded music is in the output of radio it is hard to see how this aspect of radio sound is not seen as its primary code.

Our final blind alley is the tendency, shared in both radio and sound studies, to conceive of the cultural form of sound as determined by the technologies which enabled its existence. Radio is, of course, named after its technical foundations – radio waves – and, in what is now a quaint nomenclature for its distinctive technical characteristic, was in the past called 'the wireless'. As Brian Winston (1998) has systematically demonstrated, such technologically determinist histories of the media marginalise the processes and forces through which media forms like radio sound acquire their distinctiveness. This is apparent in the radio timeline constructed by Shingler and Wieringa (1998, 1-13), for instance, where the majority of the seventy or so key moments they cite relate to technological innovations while only six relate to developments in radio's dominant form based upon playing music. While the innovations highlighted were vital enablers of radio sound, they did not determine that sound.

Sound studies fares no better in this area, either. Michael Bull's (2000, 2007) explorations of how people use portable music devices, to take one instance, focus our attention on the auditory, but present mobile listening as the creation of the technology, rather than the users of this technology as the agents of this mobility. The field has also been noticeably neglectful of radio. For example, Bull, Back et al. (2015), in an otherwise impressively diverse take on sound as a subject for study, only select one aspect of radio sound – its ability to articulate nostalgia – as important enough to require a chapter of its own, and references to radio only appear a dozen times across the other 30 essays.

By engaging with radio as encultured sound we can swiftly sidestep the need to justify studying radio through discussions about absence, avoid essentialist theories and swerve around the siren voices of technological determinism. Sound studies has much to offer here as it has been much more open to the plurality of forms of sound media and the ways in which we listen. In what follows, then, I present some suggestions of how other work on radio can be used to explore the institutionalisation of a nation's radio sound at different points in its history, and how we are constructed as listeners and audiences through this institutionalisation.

Nationally-Institutionalised Radio Sound and the emergence of its dominant form

Radio sound has changed dramatically through its history. From its very beginning, as Susan J Douglas (1987) explains, the inventor-heroes of US radio worked in emerging corporations to realise preconceived social purposes. Radio and wireless technologies were intended to create telephony – the exchange of sound messages between single users over long distances – while the wired technology that we later associated with

telephone networks was first imagined as a broadcast technology. The US navy saw the value of wireless communication between individual ships, but it was the adoption of the new technology by amateur radio enthusiasts and the exploitation of complex patents that ultimately determined what radio became in the USA. From the 1920s, radio increasingly became the primary domestic medium of entertainment in the developed world. Its output was dominated by adapting the genres of other forms of public entertainment and information: drama and variety from the theatre; educational lectures; and religious and political propaganda, and theater chains, universities, churches and political parties dominated early radio. Elsewhere, Douglas (1999) links late night radio listening and programming to male identity and later to the new music of jazz, while for Clifford J. Doerksen (2005), the broadcasting of jazz became a major moral and regulatory issue, and he traces the emergence of commercial radio programming forms that became radio's dominant organisational practices.

Radio swiftly adapted these entertainment genres to create its own forms – the quiz show, soap opera, and comedy half-hour – as their programming staples. For Michele Hilmes (1997), these genres were the source of important national narratives aimed at imagined communities of women and of men, marked out by distinct day-time and night-time forms of institutional sound: "a social practice grounded in culture" (xiiii). Single radio stations became absorbed into continent-wide networks and programming increasingly emerged from New York around conventional formats and scheduled programming, a mission to entertain, and all paid for by advertising sponsorship. The networks reached maturity in the difficult economic times of the 1930s. Radio sounded much like television today, but from the 1950s television took over from radio as the primary domestic medium in USA, appropriating radio's primetime audiences and programmes, and radio programmers responded by playing more commercially produced music recordings (Barnouw 1975).

As Rothenbuhler and McCourt (2002) relate, radio executives established new forms of radio sound to attract new listeners, bringing to the fore programming that had previously sat in the margins of sound broadcasting. The Top 40 format and the notion of the 'total station sound', established in the mid-1940s as a soundtrack for the day-time domestic labour of the post war 'housewife', were soon to became the dominant forms of US radio (Rothenbuhler and McCourt 2004). The small, mobile and cheaper transistor radios became standard in new cars and commuting suburban white-collar workers were attracted by drive-time music and information formats that emerged in response (Wall and Webber 2012). Radio stations also pursued audiences not well served by television: rural whites, poor urban African Americans and ultimately the affluent young. Country and R&B music and their hybrid, rock and roll, became characteristic of services targeted at these audiences, providing these groups a distinctive sense of identity (Malone 1985, 204-26, Cantor 1992, Barlow 1999). As early as 1947, WDIA in Memphis was aiming its programming at black urban listeners, and the format become common across all major cities during the 1950s, linked strongly to the emerging independent record companies servicing similar audiences during the period (Gillett 1971).

In Europe, radio kept to its older forms even as television became dominant in the home. Broadcasters like the BBC had a national statutory monopoly, and while radio's ability to be transmitted over borders allowed access to programming on the American model, the corporation's public service ethos produced a middle class,

middle-aged version of radio's traditionally broad output. A restriction on the playing of recorded music continued even after BBC Radio One was established to play pop records in 1967, and regional commercial music radio only started in 1973 (Barnard 2000, 50-68). Advertising-funded local radio offered an alternative to the BBC, but targeted wide listenership with familiar voices and music (Wall 2000, Stoller 2010, 27-114).

Today's music radio was established in the 1990s when station formats came to determine the type of music that a station plays. As Keith Negus (1992, 101-14) shows, contemporary hits radio (CHR), an update of the Top 40 format, had the largest number of stations and scale of listeners, was organised around a highly stratified system based upon a station's ability to attract listeners, and acted as a promotional tool for the record industry. Other stations attempted to attract more specialised music tastes, and Barnes (1988) identifies eighteen music and six non-music formats which dominated US radio in its format heyday. Urban formats (black and dance music attracting young urban listeners) have now overtaken Adult Contemporary (soft rock for the middle aged) in their ability to attract listeners, and Alternative stations (diverse music for young, white, middleclass listeners) and Country (contemporary Nashville music) attract smaller committed groups. As Barnes articulates it:

> your station convinces you, through constant repetition of slogans, that it's got more of your favourite music … so you sit through a step set of 30 second commercials and a traffic report because you know you're going to hear your favourite song … and if your station has done its job you will hear your favourite song. (50)

Even in the internet age, music radio is intimately linked to the promotional strategies of the major record companies, and radio playlists still reflect marketing strategies: building regional hits on smaller CHR stations into a national hit; or using niche format stations to attract enough interest to 'cross over' to CHR stations. As Negus (1992) notes, when record companies 'get behind' a record, investing in its promotion, this attracts the attention of major stations' music programmers, increasing its airplay and so proves the 'hit potential' of the record.

In smaller European countries, public service stations like BBC Radio One have far more influence. Here stations often focus on 'ratings by day and credibility by night' as a way of meeting their public service obligations, and so support specialist and alternative music in the evenings and weekend (Barnard 1989, 51- 62). Over the last 25 years, the policy of Radio One has waxed and waned between an emphasis on CHR Top 40 programming and attempts to offer a distinctive 'alternative' playlist. David Hendy's (2000) analysis of Radio One in the 1990s shows the result of one dramatic moment of change when a 'new music first' policy, the use of presenters with specialist music knowledge in the playlisting process, and a blurring of the 'day-time pop' and 'evening serious' binary created a new ecology of British radio, and possibly of popular music culture itself. Radio One moved decisively away from 'international repertoire' pop to greater plays for British-produced records. Likewise, Paul Long's (2007) analysis of BBC Radio One's widely-lauded music radio presenter, John Peel, is a case study of the way music acts as the primary code of radio sound and the role of presenters as taste-makers.

With all this said, as Barnard (2000) points out, this should not detract us from understanding the "over whelming allegiance to the sales charts" as the deciding playlist criteria (129-30). Computer-based scheduling is used to achieve an overall station sound that keeps listeners tuned to one station by ensuring a variety of tempo or genre and a separation of unfamiliar records. The 2000 record plays in the weekly schedule are programmed most often using a three level playlist system based upon information about record sales, plays on similar stations and market research into listener preferences. A list records get played once a programme, or even hourly on high rotation stations; B list records several times a day; and C list records may only get one or two plays per day. The result is a completely predictable music radio sound.

As I have shown elsewhere, national regulation of radio has been consistently used in a failed attempt to increase diversity of music played (see Wall 2000). I have also shown in other work (Wall 2006), that statutory obligations to play music from outside the national charts by stipulating which genres should be played and in what proportions, are sophisticatedly reinterpreted by commercial radio executives playing mainstream music. They justify this with the proposition that listeners who claimed they like distinctive genres of popular music actually only like pop with 'a flavour' of those more specialist musics. Jody Berland (1993) has characterised such arguments as an attempt to naturalise and justify the commercial processes at work in which formats "appear to spring from and articulate a neutral marriage of musics and demographics" (107) when only certain types of music targeted at certain types of audience are catered for by commercial radio. This is an interesting example of Hotelling's (1929) economic principle of the drive of profit-maximising companies to seek the centre ground.

There is an alternative radio sound to be found in the unlicensed or non-commercial sector where, it is argued, there is a stronger link between broadcaster and popular music culture. Both Hind and Mosco (1985) and Michael Keith (1997) have pointed to the way 'pirate radio' stations seldom adopt the music programming systems of licensed format stations, relying on club DJs for their shows, and usually play in music genres not often heard on mainstream radio. However, as unlicensed stations they usually have lower costs so they can afford to attract smaller audiences, and they are often as commercially-orientated as licensed stations. US college radio stations, and their smaller scale European equivalents, often display a variety of music programming not apparent in commercial music radio as a whole. Again, costs are usually kept low through the support of their host universities and the use of committed volunteers. Such stations do give airtime to specialist or new genres that make radio music far more pluralist than would otherwise be the case (Tremblay 2003, Wall 2007, Rubin 2011). The BBC's own specialist music radio programming also offers diversity. Radio One's 'service remit' requires 'specialist shows in the evening which operate at the forefront of new music' with 'at least 40% of the schedule ... devoted to specialist music or speech-based programmes' (BBC 2008), and similar service remits for the other national music radio stations produces a musical diversity not heard in the US. My own studies, with Andrew Dubber (2009), of BBC specialist music reveal the importance of the BBC for music pluralism, and the impressive experiments with online content linked to their broadcasts, even if they lag behind new music service companies and even specialist music fans online.

The access to radio sound in the twenty-first century is unrecognisable from that of the middle of the twentieth. The number of commercial radio stations within localities and at national levels has been expanding inexorably. In the UK the three music radio stations of the 1970s are matched today by over 300 AM or FM commercial music stations, as well as nearly 50 regionally-based DAB multiplexed services providing a further 8 regional and 13 national stations in each area (Ofcom 2011). More significant still is the provision of internet radio-like services. When the US broadcaster CBS bought the music service Last.fm in 2007 it signaled the profound shift from over-the-air radio to internet audio distribution technologies. Last.fm, Pandora and Spotify have come to dominate the way people listen to music. The global reach and interactive nature of the internet has recast the relationship between listener and music. These services replace music programming and DJs with automated music recommendation and personalization (Wall 2016). The spread of these music services to mobile devices repositions music radio within a wider ecology of music sound, and blurs the lines between radio listening and the shuffle potential of the iPod. In this context the idea that radio needs to have a "total station sound" seems somewhat archaic.

The listener and radio sound

As we have established already, listeners to radio sound are systematically organised by the institutionalised providers of radio services into audiences. Following Raymond Williams (1976), we can examine the shifting nuances of the ideas of audience. The term first denotes the opportunity to be heard by someone with power, but is also the collective noun for those who hear, and it later became the collective noun for those who consume culture as communication; a shift from activities of speaking, to hearing, and then to an act which is simultaneously receptive, cultural and economic. To be an audience member means far more than just listening, and our status is constructed through a number of social practices which collectively constitute sound broadcasting. These, of course, are: the technical relationship between transmitter and receiver; the semiotic relationship of the meanings of radio sound to our sound world, including the address of presenters station idents, news and adverts and the programming of music, and our relationship to others who can or do listen.

The early years of radio history reveal the conflicting attempts to define a social role for the wired and wireless technologies that would enable sound broadcasting, and its final form – as professionally created and broadcast to a distant public – defined how we became known as listeners (see Hilliard 1985, 1-11, Lewis and Booth 1989, 11-29). Paddy Scannell (1989) has noted the early BBC's role in establishing a very specific mode of listening that reflected the earliest notion of audience:

> Concentrated, active listening was demanded from listeners who were brusquely informed that if they only listened with half an ear they had no right to criticise. The deliberate avoidance of continuity in and between programmes, and of fixed scheduling (apart from news bulletins) were the major ways in which programme planners sought to discourage lazy, non-stop listening.

(332)

By contrast the modern idea that radio listening is secondary, an accompaniment to the act of rising, working, commuting and playing phases of the industrial day, assumes a very different form of listening; one abhorred by the BBC paternalistic position with its idealised listening practices. Every aspect of the sound of modern radio, though, is premised on these abstractions.

However, we lack a sustained scholarship of how listening fits with the other aspects of everyday life. While the work of Moss and Higgins (1982) is revealing, especially in its argument that radio's address reinforces mainstream thought, their approach privileges the single radio programme over the idea that it is the sound of radio which is central to our listening (and therefore interpretative) experience. Far more productive is Jo Tacchi's (2000, 2003) work, exemplary ethnographic studies of the rich place of radio sound in our lives which demonstrate that listening is not a distinct activity, not simply structured around routine, but relates to particular psychological states as an active practice of meaning-making.

There is work on how radio professionals construct 'listeners' and 'listening'. Helen Baehr and Michelle Ryan (1984) and Ros Gill (1993) examine how the discourse of presenters and programmers produces certain forms of gendered listener and my own work has explored the way professionals construct an idealised listener in a wider cultural field (Wall 2006). Given the scale and diversity of radio even within its mainstream forms, we need a far better picture of what constitutes the professional common-sense about radio listening and listeners, and we need to know far more about the extent and variability of professional discourse on this topic. Further, we need a way of relating these explanatory statements of radio professionals to the output of radio stations themselves.

Too often studies of radio are narrowly programme-focused and, as already noted, tend to privilege broadcast talk. That is not to say that talk is unimportant. Hugh Chignell's (2011) work on talks, news and current affairs as 'public issue radio' is a vital ingredient, and David Hendy's (2007)'s longform study of BBC Radio Four provides the rich, integration of discussion of institution programming and listeners we need for other forms of radio. Anne Karpf's (2013) suggestive exploration of the radio voice opens interesting doors about the way voice anchors, contains and sometimes pierces our domestic lives. The discourse of presenters imagine idealised individuals that create radio talk as pieces of pseudo-inter-personal communication. Montgomery's (1986) analysis of presenter talk shows how the presenter's address constructs complex relationships between the broadcaster and the implied listener. Frustratingly, though, most of these analyses deal with talk which is atypical of the general output of radio, neglecting how the talk operates within the context of the whole radio text and how this talk is made sense of by audience members. David Hendy (2000) has attempted to overcome these limitations, including use of my own work on the place of DJ talk in relation to musical intros where I demonstrate the way that DJ talk is ordered around the musical structure, rather than significant meaning in its own content.

There is an irony in the fact that, while the idealised listening that characterised the early BBC was soon replaced by the dominant idea of secondary listening, some of the best scholarship of the role of radio in our sound world comes from forms of radio that are predicated on idealised listening. Khan and Whitehead's (1992) exploration

of sound, radio and the avant-garde points to the untapped potential that radio has as a sound medium and Jennifer Doctor's (1999) examination of the BBC's broadcast of twentieth century art music during the 1920s and 1930s highlight the determined attempts to use radio as a cultural education channel. It is, perhaps, in the study of community radio that the relationship between radio and listeners in geographic or interest communities has been explored most fruitfully. Charles Fairchild's (2012) advocacy piece refreshingly positions music broadcasting as an explicit contribution to the public sphere as the 'aesthetics of democracy', and while its data is based in Australia, like most of the national studies cited in this chapter it bears transfer to other nations.

We should finally close this section with a reflection on the long-held dreams of mobile listening. While this is most often associated with the invention of the transistor (to the point that the 'transistor radio' was named after this key technical development) the concept and practice of portability and mobility in radio listening predates the invention of this miniaturising technology. In Schiffer's (1991) phrase, portability was a cultural imperative from the beginning of radio sound, important for the military, in cars from the mid-1920s and via pocket radios with ear-pieces from the late 1930s (Schiffer 1991, 17-31, 161-171). Nick Webber and I have argued in an earlier article that the transistor radio played a central part in a profound change in 'cultural coordinates': shifting our sense of space, time and identity. In these new contexts the sound of radio was dramatically transformed. 'Music on the move' becomes a significant icon of modernity in late 1950s USA, with WJR Detroit appropriately developing formats of news, travel and weather information programming aimed specifically at local car travelers in 1958 (Wall and Webber 2014). While first the Walkman and then the iPod became the focus for studies of mobile music (Bull 2005), the pocket radio established these principles from the 1960s (Schiffer 1993).

Conclusion

Radio, the first form of long-distance sound broadcasting, now fights for its place in the cacophony of the sounds of everyday life. However, it still offers a distinctive and widely-encountered part of our sound world. Radio-like services are an important part of the sound experience now offered by internet platforms and radio provides an important historical perspective when trying to draw conclusions about the emerging sound experience enabled by new technologies. This chapter has pointed to the essentialist, spoken-word-privileging and technologically-determinist limitations at the heart of radio studies work, and offers an integrated approach which draws on some rich and suggestive, but yet undeveloped, strands of research. The emphasis in sound studies on sound world experience and the place of radio within a wider media ecology offers significant ways forward. In return, radio studies can offer sophisticated models for understanding the distinct historical, national and media-specific ways in which sound forms emerge, and specific models to historicise our experience as listeners.

A short essay like this cannot embrace all the dimensions of radio sound and I have had to exclude important areas like fidelity, concepts of distance learning and listener community identity, and the links of radio's organisation to other media through

technology, ownership and political and cultural purpose. I haven't had a chance to look at the actual and potential alternative ways of utilising radio beyond the broadcast model as the centralised production of content for distant mass audiences. These are all immensely valuable avenues for further study in which important foundational work exists. Like the work that I have examined, they show a vibrant field ready for additional study that tells us much about an important media form and cultural experience and an aspect of our social existence that can inform broader questions of the political and economic world we construct and inhabit.

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