

CHAPTER 4

CONTENT CHANGES IN RADIO FORMATS AND PLAYLISTS

Introduction

The task of measuring media diversity has been approached from many angles. Philip Napoli (1999) in his article, “Deconstructing the Diversity Principle,” provides a useful categorization of the most common attempts to define media diversity. These are: content diversity, exposure diversity and source diversity, which includes the subcomponents ownership of media outlets, ownership of content, and workforce diversity. Napoli also states that the FCC has often looked at ownership diversity as a proxy for content diversity, assuming that diversity of ownership will de facto lead to diverse programming options. The empirical evidence for this assumed causal relationship is weak, which is, in part, why the agency has had to look elsewhere to justify its ownership rules.

One of the ways in which content diversity on broadcast radio has been operationalized is by examining the programming format of radio stations. Two years following passage of the 1996 Telecommunications Act, the FCC (1998) published a report which highlighted the increase in available formats since consolidation, and concluded that this increase was an indication of an increase in programming diversity. Three years later Mark Fratrick (2001b), research director for the National Association of Broadcasters, updated the FCC results and found a continued increase in format availability.

Most recently, BIA (Fratrick, 2002) expanded this research model to include stations inside and within listening reach of Arbitron-defined markets. This report also

charted an increase in format availability, both in terms of general and specific format categories. The BIA paper concluded,

Clearly, owners with more locally owned stations are providing more diverse programming in order to attract more listeners and compete more effectively.

Therefore, as previous studies have suggested, increased concentration has been good for listeners (p. 17-18).

Although this research has illuminated certain structural shifts in radio since the act, the impact of format changes on content diversity suggested by these reports is questionable. Is format a reliable measure of programming? What motivates a station to change format and which formats are favored? What do listeners actually gain from format changes?

Ultimately formats exist as a way to differentiate *audiences* not programming. The identity of a radio station is organized around the demographics of a particular format, which is then pitched to advertisers seeking specific consumers. As Jody Berland (2003) describes, "Formatting ensures that a station is clearly distinguishable from other stations, through a clear musical identity constructed in harmony with the precise demographics and researched common tastes of the targeted audience" (p.232). The claim that industry concentration has been "good for listeners" as evident in increased format availability needs to be examined in light of the economic function of formats. If the purpose of a format is to generate advertising revenue, market forces may satisfy some listeners' interests but render unprofitable programming options unavailable. Furthermore, in a concentrated market where station operations, including programming, are consolidated and profit is measured by national revenues, what happens to formats at

the local level? With this context in mind, this chapter takes a closer look at what happened to radio programming since the act and what those changes mean for content diversity and listener choices.

Description of Main and Supplemental Data Sources

The primary data for the following analyses was gathered from several sources. The BIA Media Access Pro database provided information on the formats of individual radio stations. Data for the aggregate format playlists analysis was collected from three years of *Radio and Records*' weekly charts. One week each from January, February and March of 1996; September, October and November of 1998; and June, July and August of 2000 were transcribed. This information generated a database of 117 charts and 4,680 charted spots. Station-specific playlists for the rock format analysis were gathered from Broadcast Data Systems (BDS), which uses digital recognition software to monitor radio airplay. Each week BDS generates a database of the music played on 1,100 radio stations, including song, artist, time and date of airplay, and how many spins a song received in a given week. Information about radio station ratings, market ranks and format definitions are gathered from Arbitron, a media and marketing research firm.

Radio Formats and the Record Industry

The development of formats begins with the record industry's desire to market music to consumers in a relatively predictable manner in order to survive the economic risks involved in production. The record industry has created genres based on past sales trends in order to connect a sound to a catalog of similar sounds, and then connect that catalog to an identifiable market. In Keith Negus' (1999) study of the creation,

circulation and consumption of popular music he describes the anxiety a record company attempts to quell by producing industry knowledge about consumers' musical tastes:

One of the most obvious ways in which record company strategy attempts to resolve the problem of production and consumption is through the organization of catalogues, departments and promotional systems according to genre categories (p.47).

These genre categories help talent scouts identify artists with potential commercial appeal and inform marketing departments how to sell the artists.¹ In other words, the central purpose of genre categories is to answer the questions, what does it sound like and who will buy it? Commercial radio broadcasting has relied upon a similar strategy in the development of formats.

In the current economic configuration of commercial radio, the industry can be seen as two things: From the perspective of the record industry, radio is a conduit through which record companies expose audiences to the music they have to sell. From the perspective of broadcast owners, radio is a medium through which broadcasters can sell commercial time to advertisers. As with commercial television, the programming (music, talk radio, sports) exists to draw the audience (listener) to the advertiser. As Lowry Mayes, founder and CEO of Clear Channel made perfectly clear in an interview with *Fortune* magazine,

¹ Sometimes, Negus (1999) points out, these categories create blind-spots so that artists who transgress established genres are often overlooked by talent scouts. Here, the independent label, less constrained perhaps by genre catalogs, may identify new music, foster its growth until the artists are popular enough to create a new genre category that a major label can identify and thus market (p. 91). This is the shared history of grunge and rap music in the United States.

If anyone said we were in the radio business, it wouldn't be someone from our company. We're not in the business of providing news and information. We're not in the business of providing well-researched music. We're simply in the business of selling our customers' products (Chen, 2003).

The customers to which Mays is referring, are advertisers and their consumer goods.

The radio format is, much like genre categories, a mechanism created and relied upon by the radio industry to quell anxiety about listeners. The central questions it attempts to answer are, who is listening and how can we sell that audience to an advertiser? Through organizations like Arbitron, which provides format-based ratings and demographic information, radio stations hope to create some predictability about the audience in order to successfully sell airtime. To some extent radio formats mirror genre categories; rock, country and jazz are standard classifications for music in a record store and on a radio station. This coherence has evolved in part from the position of broadcast radio as an "intermediary" between record companies and potential record buyers (Berland, 2003, p. 232). Keeping the genre categories and radio formats similar reinforces listener recognition, and acts in tandem to teach listeners how to think about music in terms of "tastes" or "styles".²

Format Analysis

As stated above, within the radio industry formats exist to differentiate stations.

Typically this differentiation is based upon what a radio station plays – the type of music

² Perfect coherence between genre categories and radio formats does not exist, of course. New genre categories are created more frequently than formats. When a new musical genre is established, radio formats are often redefined by what is played rather than by what a format is called. Sub-formats or format hybrids will typically integrate a new genre before a new format label is standardized.

it spins. It is important to note that there is no standardization for what constitutes a format. Format definitions are approximations of what types of music are likely to be heard on a given station. For example, Madonna is a popular artist found on adult contemporary (AC), but will often appear on contemporary hits radio (CHR) if she releases a new album. Also, format definitions shift over time as new artists and new forms of music become popular and are integrated into existing formats or encourage the creation of a new format. For example, adult alternative developed as a format for “softer” artists like Sarah McLachlan and the Dave Mathews Band while the alternative format focused on the growing popularity of 1990s grunge-inspired guitar-rock.

Finally, format names are not standardized among industry organizations. In particular, the format lists for Arbitron differ slightly from those used by BIA, although approximate matches are generally available. In the following format and playlists analyses, incongruities between format names are noted when necessary.

Changes in Specific Format Variation

The first content analysis considers local variation in *specific format*, which is a self-reported measure provided by radio stations to BIA data collectors for inclusion in the Media Access Pro database. BIA lists 428 specific formats, which includes combinations such as news/talk and adult contemporary/middle of the road (MOR). The first format listed in format combinations indicates the type of programming aired for the largest portion of airtime, while the second format indicates the second most-aired programming, and so on.

In the four years following the 1996 Telecommunications Act, most radio markets in the sample experienced an increase in the number of specific formats broadcast. This

increase held true across market-size, with most markets showing an increase in specific format variation (see Table 4.1). This change echoes the findings of the previous studies discussed above and would seem to support the argument that local concentration of ownership improves content choice when measured by the number of specific formats available to listeners (see Appendix G for specific format changes by market).

Table 4.1: Percentage Change in Specific Formats, 1996-2000

Market	Increase	No Change	Decrease
Overall Sample	74.14%	17.24%	8.62%
Small (200+)	61.11%	33.33%	5.56%
Midsize (100-199)	65.00%	15.00%	20.00%
Large (1-99)	95.00%	5.00%	0.00%

Economists Berry and Waldfogel (2001) suggest that concentration of ownership in any given market will actually encourage greater format variation because owners will chose not to compete with themselves for audiences of the same musical tastes, but instead, diversify their local portfolio by switching to a format that is not as well represented in the market. This is the case in large markets where 95% of those markets experienced an increase in specific format variation, 5% no change, and not a single large market in the sample saw a decrease in total specific formats available.

However, it is significant to point out that for many towns and cities, specific format variation was not improved after the 1996 Telecommunications Act. Approximately a quarter (25.86%) of the markets in the sample experienced a decrease or no change in the number of specific formats. Furthermore, despite an increase in variation for the majority of both small and midsize markets (61 and 65%, respectively), a third of these markets saw a decrease (small, 33.33%; midsize, 15%) or no change (small, 5.56%; midsize, 20%) in specific format variation. Thus, ownership

concentration, which occurred most significantly in small and midsize markets, does not necessarily lead to improved specific format variation. Instead, it would seem small and midsize markets are at least half as likely to experience a decrease or no change in specific format variation, as those markets are likely to see an increase.

Part of the explanation as to why small and midsize markets do not enjoy the same likelihood of increased format variation as large markets is because there are a smaller number of stations available in these markets compared to large markets. For example, Canton, OH is a midsize market with 12 available stations, and thus only 12 possible specific formats. On the other hand, a large market like Boston has 56 stations, and thus the potential for 56 specific formats. In order to conduct a closer examination of format variation across markets it is necessary to utilize a measure that considers the format variation of a market in light of the total number of stations available in that market. The format to station ratio is a clearer measure of this phenomenon.

The format to station ratio of a market is the total number of specific formats listed for a market divided by the number of stations available in a given market. This yields a measure of how varied the formats in a market are given the number of stations available, and thus allows for comparisons across differently sized markets. A format to station (F:S) ratio of 1 indicates that every radio station programs a different format with no duplicated formats in that market. A format to station ratio closer to zero indicates many radio stations in the market program the same format.

Upon examining format changes by individual market and comparing those changes to changes in local ownership, Berry and Waldfogel's (2001) assumption that increased concentration encourages increased format variation is further challenged. As

many markets became more concentrated between 1996 and 2000, format to station ratios actually dropped (see Table 4.2). In other words, fewer owners often led to fewer formats. For example, twenty-five markets in the sample experienced an increase in radio ownership concentration of 20% or more. Of those markets, 36% saw a decrease in format to station ratio, and thus a decrease in local format variation. Similarly, nearly 37% of the markets with a 10 to 19% increase in ownership concentration experienced a decrease in format to station ratio.

Table 4.2: Correlation of Increase in Concentration and Format to Station Ratio, 1996-2000

Increase in Concentration 1996-2000	Number of Markets	Decrease in F:S Ratio	No Change in F:S Ratio	Increase in F:S Ratio
20-37%	25	36.00%	12.00%	52.00%
10-19%	19	36.84%	5.26%	57.89%
0-9%	14	21.43%	14.29%	64.29%
Total Sample	58	32.76%	10.34%	56.90%

Although the majority of markets in the sample (56.9%) experienced an increase in format to station ratio, markets with the smallest change in concentration were the most likely (64.3%) to increase local format variation (see Appendix H for a complete table of changes in local format variation). In fact, by November 2000 when merger and acquisition activity in the radio industry had waned, the most diverse markets as measured by format to station ratio were the least concentrated (see Table 4.3).

Table 4.3: Market Concentration and Format to Station Ratio, 2000

Level of Concentration	Number of Markets	Percentage of Markets with an F:S Ratio of			
		0.80+	0.70 - 0.79	0.60 - 0.69	0.50 - 0.59
61%-76%	22	22.72%	27.27%	45.45%	4.55%
51-60%	19	21.05%	26.32%	47.37%	5.26%
0-50%	17	47.06%	17.65%	23.53%	11.76%
Total Sample	58	29.31%	24.14%	39.66%	6.89%

While ownership concentration cannot necessarily be universally blamed for more homogenized format options in a market, it is not a reliable predictor of increased format variation either. Given such, the FCC and industry analysts need to look beyond ownership before celebrating the diversifying influence of market concentration, and consider closely other factors which may contribute to shifts in specific formats.

Changes in Format Category Variation

The second content analysis considers variations in *format category*, which is a wider classification of broadcast content than specific formats. BIA groups the self-reported formats of radio stations into 19 format categories. For example, modern rock, alternative, new rock and progressive would all be classified in the rock format category. It is useful to examine general format categories in addition to specific formats, because it is difficult to classify radio formats as defined by hundreds of programming staffs across the country. General format categories provide some measure of standardization.

Overall, markets in the sample did not experience the same level of increase in format category variation as those markets did in specific format variation in the four years following the act (see Table 4.4).

Table 4.4: Percentage Change in Format Categories, 1996-2000

Market	Increase	No Change	Decrease
Overall Sample	58.62%	25.86%	15.52%
Small (200+)	61.11%	33.33%	5.56%
Midsize (100-199)	60.00%	20.00%	20.00%
Large (1-99)	55.00%	25.00%	20.00%

This result is unsurprising, as the number of possible format categories by which stations are identified is significantly smaller than the number of specific formats, and stations may move among specific formats without changing their format category

assignment. For example, if a station programmed hot AC music in 1996 and then programmed soft AC in 2000, the specific format changed but the format category, adult contemporary, remained the same.

In contrast to specific format variation, a greater number of markets in the sample saw a decrease in format category variation. In particular, where specific format variation remained steady or increased for large markets, format category variation dropped for 20% of the large market sample. Decreases in format category variation in midsize (20%) and small markets (5.56%) fared the same as decreases in specific format variation.

This analysis highlights that the gains in content diversity as measured by format choice may be more complex than the charted increases cited by the FCC and industry analysts. In particular, looking at markets that saw an increase in specific formats but a decrease in format categories means the specific formats that were added replaced formats that existed in a variety of categories. For example, although Atlanta, Georgia gained three specific formats (Americana, jazz, and rock AC), the market lost four format categories (big band/nostalgia, talk, middle of the road and classical). What this trend suggests is a convergence of station programming toward to a handful of format categories.

As more stations are acquired, super group owners have concentrated the majority of their programming into four to five format categories. For example, of Clear Channel's 191 stations in the sample, 116 stations (or 60.73%) are programmed in the following four format categories: adult contemporary, album oriented rock, contemporary hits radio and news (see Table 4.5). The remaining 75 stations are programmed across 10 other format categories. Similarly, Citadel, with 54 stations in the sample, programs 34 stations

(62.96% of sample total) in four format categories: news, country, oldies and contemporary hits radio. The remaining 20 stations are programmed in nine other format categories.

Table 4.5: Top Format Categories of Super Group Owners

Company	Total Stations in Sample	Top Formats	Stations in Top Formats	Percentage of Total in Sample
Clear Channel	191	AC, AOR, CHR, News	116	60.73%
Citadel	54	News, Country, Oldies, CHR	34	62.96%
Infinity	41	Country, AC, AOR, News, Oldies	27	68.85%
Cumulus	37	CHR, AC, AOR, Rock, Urban	21	56.76%
Entercom	29	News, AC, AOR, Rock	17	58.62%

As discussed above, a majority of discrete markets did experience an increase in both specific format and format categories since 1996, and thus increased local format variation. However, when considered nationally, most commercial radio stations in the United States continue to be programmed in a handful of formats. According to BIA, as of November 2000, 64.75% of the nation's radio stations were programmed in the following six formats: country (20.2%), adult contemporary (11.5%), religion (11.4%), news (8.3%), oldies (7.8%) and album oriented rock (7.8%). Over the course of four years, format categories did become more evenly distributed across the sample (see Table 4.6), although by a small measure relative to the degree of ownership consolidation. Concurrently, a few format categories that were programmed on a tiny portion of stations, in particular, jazz/new age, classical, easy listening and middle of the road, continued to lose ground (see Table 4.7).

Table 4.6: Distribution of the Top Six Format Categories in Sample, 1996-2000

Format Category	Percent 1996	Percent 1998	Percent 2000	Arbitron Share 2000
Country	17.52	14.31	12.74	8.8
Religion	12.32	13.03	12.36	2.2
Adult Contemporary	9.71	9.35	9.15	14.4
News	9.63	9.91	9.08	16.3
Oldies	7.03	7.43	7.25	7.9
Album Oriented Rock/Classic Rock	6.85	6.71	7.09	9.3
Total	63.06	60.74	57.67	58.9

Table 4.7: Distribution of the Bottom Six Format Categories in Sample, 1996-2000

Format Category	Percent 1996	Percent 1998	Percent 2000	Arbitron Share 2000
Miscellaneous	1.56	1.92	2.21	n/a
Easy Listening	4.16	3.04	3.05	0.1
Ethnic	1.13	1.36	1.22	n/a
Middle of the Road (MOR)	1.99	1.52	1.14	2.2
Jazz/New Age	1.21	0.88	0.99	3.1
Classical	0.69	0.80	0.69	2.6
Total	10.74	9.52	9.30	8.0

Packaged Content: Voice-Tracking and Radio Networks

The continued concentration of programming into a handful of formats is the result of several factors. For the radio station owner, perhaps the most important reason is the popularity of these formats among audiences. According to Arbitron (2001) the total audience share of the top six formats listed in Table 4.6 was 58.9 for the year 2000. This means that on average nearly 60% of the potential radio audience is tuned in to one of these six formats.³ Although popularity is a compelling reason to adjust a radio station format, other economic and technological explanations in light of industry consolidation deserve attention.

³ The popularity of a radio format among audiences does not necessarily coincide with the most frequently available formats. This apparent disconnect is discussed below in regards to audience demographics and advertising revenue.

In addition to ownership concentration encouraging content diversity, Berry and Waldfogel (2001) also predict two other effects. They argue that mergers may decrease variety if less profitable stations are shut down after purchase or if owners buy up entire blocks of stations in order to impede new entrants. During the four-year mergers and acquisitions frenzy, newly purchased radio stations were very rarely shut down. Instead, poorly performing stations were targeted for format change or consolidated into the operations of nearby stations. In fact, the FCC and industry analysts reported that previously dark, off-air stations began broadcasting when purchased by multi-station radio companies thus, the argument was made, improving service to the community.

Buying up blocks of stations to deter new entrants was, as Berry and Waldfogel (2001) theorized, one of the effects of ownership deregulation. As discussed in the previous chapter, the sale price of a single station skyrocketed following the act, essentially barring investors with limited capital from purchasing radio properties. In terms of content diversity, the practice of block-buying and eliminating duplicate formats has created group-owned stations in local markets that are “differentiated, but not by too much” (p. 1012). In other words, group owners develop a local portfolio of stations that program multiple formats in order to generate advertising revenue around several demographic groups, but avoid product (i.e. station) differentiation to the extent that it undermines economies of scale benefits. For the super group owner, these economies of scale benefits are most advantageous when applied to the national arena.

Specializing in a handful of formats and adjusting company properties in order to utilize those formats is common practice in Clear Channel’s “cluster” ownership strategy. Clear Channel has developed four content “brands” which the company uses to program

blocks of stations within the same format. These brands are, KISS which programs contemporary hits radio (CHR) music for 50 stations; MIX which programs adult contemporary (AC) music for 24 stations; FOX which programs classic rock, also known as album oriented rock (AOR) for 14 stations; and LITE which programs soft adult contemporary (soft AC) music for seven stations. This approach to programming allows Clear Channel to research artists and songs for optimum demographic appeal, plug those songs into the appropriate brand/format playlist, and send that playlist to individual stations where a live or, more often than not, prerecorded disc jockey simply announces the local time, weather and title of songs. As Clear Channel stated in its 1999 annual report, “Create it once, use it often. That is the credo of the cluster” (p. 4) Not surprisingly, Clear Channel’s most frequently programmed formats correspond to these brands (see Table 4.8), which are, particularly in the case of CHR, often higher than the format’s national prominence.

Table 4.8: Clear Channel Top Formats and National Prominence, 2000

Format	Percentage of Clear Channel Stations	Percentage of Stations Nationally*
Adult Contemporary [†]	14.01%	11.95%
Album Oriented Rock	6.63%	5.78%
Contemporary Hits Radio	11.75%	3.72%
Total	32.39%	21.45%
*Based on data from Arbitron’s 2000 radio industry survey. [†] This includes general AC, Hot AC and Soft AC.		

In addition to preprogrammed playlists, super group radio stations have been able to eliminate live disc jockeys altogether and use one on-air talent for dozens of stations. A technology called voice-tracking has become increasingly popular with companies that own multiple stations, particularly within the same format. Voice-tracking is a digital recording and editing technology used to splice together a DJ’s prerecorded, between-

song comments with music and commercials. The entire package is then delivered via a telecommunications network to technicians at multiple radio stations for local broadcast. A typical five-hour DJ shift can be recorded in less than an hour, and if the DJ's comments are vague enough, listeners may be unable to discern that the DJ is not live or local.

An on-air talent may be directly employed by a radio company or may be on the staff of a radio network that provides programming to affiliated stations. One such radio network is Westwood One, a company owned and managed by Infinity Broadcasting which is a subsidiary of media giant Viacom Incorporated. Westwood One provides programming to 7,700 radio stations, including the 185 stations owned by Infinity. Services include 24-hour, seven days a week music programming, a controversial radio talk show hosted by Howard Stern, news headlines from Viacom-owned CBS television network featuring national news anchor Dan Rather, movie reviews and film star interviews from the Viacom-owned E! cable television channel, music news and artist interviews from Viacom-owned MTV and VH1, and two-minute audio clips from Viacom-owned *The Daily Show with Jon Stewart* on Comedy Central and *LateNite with David Letterman* on CBS. The radio network specializes in formats that reflect its parent company's media holdings: MTV provides programming for alternative rock and contemporary hits radio formats; VH1 features classic rock and adult contemporary music, Black Entertainment Television (BET) provides urban format programming; and Country Music Television (CMT) features country music.

Premiere Radio Networks, owned and operated by Clear Channel, does not have the same large media holdings from which to draw programming as Westwood One.

Nonetheless, Premiere reaches 180 million listeners a week through 7,800 radio stations and 70 programs. The network specializes in the talk radio format with personalities such as Rush Limbaugh and Dr. Laura Schlessinger, and morning drive programs like the Bob (Kevoian) & Tom (Griswold) Show heard on 130 stations nationwide.

If ownership caps in the 1996 Telecommunication Act had remained at 20 AM and 20 FM stations nationwide and local ownership restrictions held, the cost of using voice-tracking technology and radio networks like Premiere and Westwood One for, at most, 40 stations would not financially justify firing local DJs and consolidating station operations. But in a relaxed regulatory environment, these technologies have fundamentally altered the way in which stations fill airtime, including the on-air talent as well as how stations sell commercial spots.

Demographics, Ratings and Ad Revenue

Another key element to understanding the distribution of formats is the influential role audience demographics, station ratings and advertising dollars play in how stations leverage multiple radio properties in a market and nationwide. As stated above, formats primarily exist to differentiate stations to advertisers as well as listeners. Through extensive market research, organizations such as Arbitron have identified key demographic groups by radio format. Published yearly in its *Radio Today* series, Arbitron lists the ratings and demographic breakdown for a list of 13 radio formats (see Appendix I). The most popular formats are news/talk/information, adult contemporary, contemporary hits radio and rock. As shown in Table 4.9, some of the most frequently programmed formats are not the most popular among audiences. Likewise, a few of the most popular formats among audiences are not common on the radio dial. For example,

urban represented only 2.36% of commercial radio stations in 2000, but accounted for a 7.6 audience share. Contemporary hits radio (CHR) was the third most popular radio format in 2000 with a 11.5 share, but was programmed on only 3.72% of the nation's commercial radio stations (Arbitron, 2001).

Table 4.9: Arbitron Format Ratings and Format Frequency, 2000

Format	Arbitron Rating	Portion of Total Stations
News/Talk/Information	16.3	12.94%
Adult Contemporary	14.4	11.95%
Contemporary Hits Radio	11.5	3.72%
Rock	9.3	5.78%
Country	8.8	17.15%
Oldies	7.9	7.31%
Urban	7.6	2.36%
Spanish	6.7	4.34%
Alternative	5.0	3.38%
Adult Standards	3.1	9.79%
Jazz/NAC	3.1	1.08%
Religious*	2.2	13.28%

*Although religious format stations account for a large portion of programming, collectively these stations only gathered a 2.2 share in 2000. Most of these stations are owned by independent, one-station broadcasters.

The apparent discrepancy between the rating (the industry measure of popularity) and the frequency of a format can be, at least partially, explained as a result of the economic function of formats. As is true in other commercial-based media forms, in particular television and magazines, advertisers are willing to pay more for demographic groups they believe are most able and likely to purchase the products advertised. Trends and market myths guide much of how advertising rates are established. For example, it is widely practiced that the male, 18-35 year old market will typically cost an advertiser the most per second or, in the case of publishing, per inches to reach. For example, in the late 90s a television spot cost \$23.54 per thousand for 18-35 year olds, while audiences over 35 cost \$9.57 per thousand (Grossman, 1998). The younger demographic group appeals

to advertisers because, it is believed, adults of this age range purchase more high-end products than other demographic groups. Older consumers, particular those over 50, are assumed to be set in their shopping habits, loyal to brands they established a buying history with in their twenties and thirties.

Market research analyzes the buying habits of consumers and collects this data into consumer profiles which have become, to some extent, commonsense among buyers and sellers of commercial space. However, over the past several years the media industries have challenged this commonsense as the demographics of the country shifted, the number of media outlets increased and further stratified audiences, and market research techniques improved. For example, television and cable operators have frequently questioned the accuracy of Nielsen's rating collection methods and the industry practice of manipulating programming to pull larger audiences during sweeps weeks (Bauder, 2003). Nevertheless, Nielsen's ratings data continues to set the price for commercial airtime.

With regards to radio, closer scrutiny of the advertising practices of commercial stations revealed what former FCC chairman William Kenard called "myopic" and civil rights leader Al Sharpton claimed were "racist" policies. A study released in January 1999 found that companies were reluctant to advertise on ethnic radio stations or stations that appealed to racial minorities, even if those stations were among the most popular in a market (Ofori, 1999). Evidence proposed that advertisers had "no Urban/Spanish dictates" and "minority discounts," which undermined the ability of "ethnic" format broadcast owners to generate revenue comparable to non-ethnic format broadcasters. The

rationale for this behavior stemmed from entrenched, “commonsense” marketing myths about minority consumers:

Anecdotal data collected by the study suggest that in certain instances, the media buying process is guided by ethnic/racial stereotyping, underestimations of disposable income, the desire to control product image, unfounded fears of pilferage, etc. (p. 2).

This information might account for the poor showing of urban formatted stations nationwide (only 2.36%), even though urban stations are by far the most popular format among black listeners (Arbitron, 1998). Only jazz/new age, the second most popular music format with black audiences, and classical had fewer stations.

When the cost of a commercial spot is based on a race and age hierarchy, it follows that formats favored by non-white audiences and listeners over 45 are dwindling on the commercial radio dial. The leveling-out of formats trumpeted by the FCC and the NAB did not increase easy listening, MOR, jazz/new age, oldies or ethnic stations,⁴ formats which either lost or maintained a small number of stations between 1996 and 2000.

Aggregate Playlist Analysis

Given that radio stations depend on formats to organize audiences for advertisers and the FCC and industry has relied upon formats as a measure of “diversity,” it is important to take a closer look at how formats influence airplay. Questions organizing

⁴ Arbitron combines easy listening and MOR into adult standards, with a majority of listeners over 65 years old. Ethnic stations in the BIA database do not include Spanish-language or Spanish-music stations, but any other non-English language music and talk format. In fact, unlike the ethnic format, the Spanish format was one of a few non-white audience formats to see an increase in stations since 1996, catching up with the

this analysis include: How different are specific formats in terms of actual songs played? What significant differences or similarities exist between formats? And, are musical formats a reliable measure of content diversity?

An industry standard for examining radio formats is *Radio and Records* magazine, which ranks the total plays, or spins, a song receives in a given week. Over 1,000 radio stations in the top 140 markets are monitored, and once a week *R&R* publishes 13 format-based charts (see Table 4.10). These charts are used by record labels and radio stations to track the national exposure of a new song. Over about a month a record label would hope to see a new release added to enough stations nationwide that the song would eventually appear on an *R&R* chart and move into a top 10 slot before dropping off the chart and being replaced by newer songs.

Table 4.10: *Radio and Records*' Weekly Charts

Format	Songs on Chart	Format	Songs on Chart
Adult Contemporary	Top 50	Active Rock	Top 50
Adult Alternative	Top 30	Alternative	Top 50
Hot AC	Top 30	NAC/Jazz	Top 30
Pop Alternative	Top 20	Rock	Top 50
CHR/Pop	Top 50	CHR/Rhythmic	Top 50
Country	Top 50	Urban AC	Top 30
Urban	Top 50		

This aggregate data should not necessarily be interpreted as an indication of the popularity of a new song among audiences, although this misconception is common. A song may be perceived as popular because it gets frequent airplay, and this perceived popularity may make a song even more popular. The record industry relies on spin repetition in order to impress a new song on audiences and generate this popularity perception. As such, adding a new song to a radio station's playlist is crucial to the

popularity of that format among audiences.

success of that song. To better the odds of success, the record industry commonly practices a form of payola called pay-for-play.

Payola was outlawed over thirty years ago following a scandal with popular radio disc jockey Alan Freed who, among others, took cash and gifts from record labels in exchange for playing their records. Today a legal form of this, pay-for-play, involves independent promoters paying radio stations to add songs to their playlists. In turn, the promoter is paid by the record label based on how many “adds” he or she is able to secure. In 1998, Chancellor Media (now owned by Clear Channel) signed \$25 million in pay-for-play contracts for their 465 stations (Taylor and Schiffman, 1998). During the summer of 2004, pop singer Avril Lavigne’s single “Don’t Tell Me” got a chart boost from pay-for-play deals that aired in the middle of the night (Surowiecki, 2004).

Although a third party “independent” promoter and a brief disclosure before a paid-for song airs makes this form of payola legal, the result is the same: Songs on the radio are not necessarily played and played frequently because audiences want to hear them. Furthermore, late night manipulation of song spins – Lavigne’s song was reportedly played eighteen times between midnight and 6:00am on one Nashville station – skews the *R&R* charts and does not accurately represent typical song rotation. Nevertheless, the *R&R* data gathered here is not under examination as a proxy for popularity, but is employed simply to see what formats consist of and what sort of variation exists within and among formats.

Charts were collected from three time periods: one week each from January, February and March of 1996; September, October and November of 1998; and June, July and August of 2000. This information generated a database of 117 charts and 4,680

charted spots. Over the five years examined, the number of artists, songs and record labels represented in the charts increased, with the greatest change between 1996 and 1998 (see Table 4.11).

Table 4.11: Change in Number of Artists, Songs and Record Labels Present, 1996-2000

Year	1996	1998	Change 96-98	2000	Change 98-00	96-00 Change
Charts	39	39	---	39	---	---
Charted Spots	1,560	1,560	---	1,560	---	---
Artists	318	426	+108	429	+3	+111
Unique Songs	405	516	+111	514	-2	+109
Record Labels	143	183	+40	186	+3	+43

Chart Overlap: Format Pairs

As discussed above, radio station format has been used by the FCC and industry analysts as a measure of content diversity, and the increase in format variation since 1996 as evidence of greater diversity on the radio dial. This conclusion assumes that the content of one format is markedly different from that of another. In the case of country and new age/jazz, for example, this is true. These two, distinct formats play songs that are rarely aired on other formats. However, for many of radio's most commonly programmed formats there is a high degree of overlap. As illustrated in Table 4.12, there is a significant amount of chart overlap in the rock categories, and to a lesser degree within the adult contemporary formats. The top six format pairs listed below shared at least one-third and up to two-thirds or more of their playlists in 2000.

Table 4.12: *Radio and Records*, Chart Overlap by Format Pairs

Format Pairs	1996	1998	96-98 % Change	2000	98-00 % Change	96-00 % Change
Active Rock & Rock	68.67%	69.33%	0.66%	69.33%	0.00%	0.66%
Active Rock & Alternative	65.33%	48.67%	-16.66%	57.33%	8.66%	-8.00%
CHR/Rhythmic & Urban	52.00%	48.00%	-4.00%	56.00%	8.00%	4.00%
Alternative & Rock	50.00%	40.00%	-10.00%	52.00%	12.00%	2.00%
CHR/Pop & Hot AC	52.00%	48.67%	-3.33%	35.33%	-13.34%	-16.67%
Urban & Urban AC	44.00%	29.33%	-14.67%	35.33%	6.00%	-8.67%
AC & Hot AC	55.56%	33.33%	-22.23%	27.78%	-5.55%	-27.78%
Adult Alternative & Rock	29.33%	16.67%	-12.66%	13.33%	-3.34%	-16.00%
Alternative & Adult Alternative	29.33%	28.00%	-1.33%	12.00%	-16.00%	-17.33%
Notes: Percentage overlap between two formats is calculated as the number of overlapping songs divided by the number of songs in the chart. If the chart sizes are different, the larger chart size is used in the denominator. For example, Hot AC has 30 songs in its R&R chart, while CHR/Pop has 50 songs. For the percentage overlap between the charts for Hot AC and CHR/Pop, 50 was used.						

Rock and active rock are nearly the same in terms of the songs most frequently played on these formats, with over 69% of rated songs appearing on both charts in 2000. This is perhaps unsurprising since these formats are part of the same format category, rock. Less expected is the substantial (56% in 2000) overlap between seemingly unrelated formats, contemporary hits radio/rhythmic and urban. According to Arbitron, the demographics for these formats differ slightly. CHR appeals to a slightly younger audience and urban attracts more black listeners (Arbitron, 2001).

It should also be noted that over the five years of industry consolidation, several format pairs became less similar.⁵ Most significantly, alternative and adult alternative shared 29% of charted songs in 1996 but only 12% in 2000. Similarly, adult alternative and rock became more distinctive by summer 2000, but rock and alternative continued to

⁵ The overall decrease in overlap among formats illustrated in Table 4.12 may suggest that industry consolidation actually encouraged greater playlist variety. In order to determine this effect, individual station playlists before and after consolidation need to be examined. Archive playlists data was inaccessible and thus, unfortunately, such an analysis is not included in this project.

share over 50% of charted songs. This particular change in format overlap can be contributed to the overall shift in adult alternative programming through the mid-90s. Capitalizing on the sudden popularity of grunge-rock bands like Nirvana, the record industry sought after and signed guitar-driven rock bands like 3 Doors Down, Creed, Nickelback and Incubus. This type of music soon dominated the young and male-centered alternative and rock formats, thus moving softer contemporary artists such as Matchbox Twenty and the Dave Matthews Band to adult alternative for older and mixed gender audiences.

Chart Overlap: Format Trios

The similarity among *R&R* charts is also evident in format trio combinations, where the overlap of three charts is compared. Significantly, active rock, rock and alternative are essentially the same format with 47% of songs appearing on all the three charts (see Table 4.13). Hot adult contemporary, contemporary hits radio/pop and pop alternative shared a quarter of songs. Overall, format trios became less similar between 1996 and 2000. Pop alternative shared less song overlap with the rock and alternative formats and shared more song overlap with hot adult contemporary. As discussed above, adult alternative moved away from rock formats and toward hot adult contemporary and contemporary hits radio by 2000.

Table 4.13: *Radio and Records*, Chart Overlap by Format Trios

Format Trios	1996	1998	96-98 % Change	2000	98-00 % Change	96-00 % Change
Active Rock, Rock & Alternative	47.33%	38.67%	-8.66%	47.33%	8.66%	0.00%
Hot AC, CHR/Pop & Pop Alternative	16.67%	36.00%	19.33%	26.00%	-10.00%	9.33%
CHR/Rhythmic, Urban & Urban AC	25.33%	12.67%	-12.66%	18.67%	6.00%	-6.66%
Hot AC, CHR/Pop & Adult Alternative	6.67%	22.67%	16.00%	13.33%	-9.34%	6.66%
AC, CHR/Pop & Hot AC	26.00%	17.33%	-8.67%	10.00%	-7.33%	-16.00%
Active Rock, Alternative & Adult Alternative	20.00%	10.00%	-10.00%	4.67%	-5.33%	-15.33%
Active Rock, Rock & Adult Alternative	22.00%	10.00%	-12.00%	4.67%	-5.33%	-17.33%
Active Rock, Rock & Pop Alternative	25.33%	5.33%	-20.00%	4.00%	-1.33%	-21.33%
Active Rock, Alternative & Pop Alternative	24.67%	4.67%	-20.00%	3.33%	-1.34%	-21.34%

From this examination it is evident that some of the most popular formats do not vary much, even with decreases in chart overlap. In particular, there is very little product differentiation between related formats like rock and active rock. As such, format categorization may represent a rather superficial measure of content diversity. Berland (2003) writes, “The organization of audiences by music format does rationalized the radio market, but this is not the same as diversifying or enriching radio programming” (p. 232-233). Dimensions of media diversity are multiple and complicated. As the policy-making community continues to navigate a changing media landscape and search for empirically sound and accurate ways to assess diversity, format variation should be reconsidered and used cautiously in conjunction with, for example, the actual playlist variation of individual radio stations.

Individual Playlists Analysis

It is possible to investigate the playlists of individual stations without listening to and jotting down each song as it spins. Using digital pattern recognition technology, Broadcast Data Systems (BDS) records the title, artist and time of day that a song is played on over 1,200 commercial radio stations in the United States, Canada and Puerto Rico.⁶ This information is collected daily and used by the record industry to track the exposure of their signed artists and by radio stations to compare their programming to that of competing stations. *Billboard* and *Airplay Monitor* also use BDS to determine radio airplay music charts.

The data is proprietary and membership-only access is expensive. Temporary access was granted for this project by the BDS customer service department in March of 2002, but data collection was limited to the rock format only. Archived material before 2001 was inaccessible, and thus data in the 1996-2000 time frame was unavailable for analysis. As a compromise, one week each from March 2001 and 2002 were captured, generating a database of 389,095 recorded spins. This data does not provide historical information on changes in individual playlists during the consolidation of radio in the five years following the 1996 Telecommunications Act. It does, however, allow for comparative analyses of playlists on stations owned by super group radio companies and stations operated by small and individual station owners. The questions guiding this examination include: How, if at all, do the actual playlists of super group versus individual stations differ? What type of stations play the most unique music and have the most varied song rotations?

⁶ BDS is operated by the television ratings monopoly Nielsen Media Research, which is a

BDS Rock Format Data

Five sub-formats are included in the BDS rock category: modern rock, active rock, heritage rock, triple-A and mainstream rock (see Table 4.14). The playlist data for mainstream rock was eliminated because the sample size, three stations, was too small for valuable analysis. Modern rock, also known as alternative rock which tends to play the most contemporary artists and their latest albums, consisted of 81 stations in the 2002 BDS roster.⁷ BDS paneled 46 active rock stations, which play a variety of popular rock songs from today and the last five years. Heritage rock, also known as classic rock, plays older rock hits from the 1970s, 80s and 90s. Frequent artists include Led Zeppelin, AC/DC and Aerosmith. BDS monitored 96 heritage rock stations in 2002. Triple-A, also known as adult album alternative, is alternative rock for an older audience. This format offers a hybrid of modern, heritage and active rock music. With only 18 stations in the data set, triple-A was too small for individual playlist analysis.

Table 4.14: BDS Rock Format Data, 2001 and 2002

Format	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Modern Rock	75	0.197	81	0.184
Active Rock	43	0.243	46	0.227
Heritage Rock	92	0.351	96	0.340
Triple-A	18	0.416	18	0.422
Mainstream Rock	2	n/a	3	n/a
Total	230	0.302	244	0.293
Notes: The P:S ratio is the number of unique songs on a station's weekly playlist divided by the total number of songs played. A P:S ratio closer to 1 indicates a more varied playlist, while a ratio closer to 0 indicates greater song repetition.				

subsidiary of VNU, a worldwide marketing information company.

⁷ For the most part, stations monitored by BDS in 2001 were also monitored in 2002.

Three stations were dropped from the list, while 17 stations were added. See Appendix J

Song Repetition

Since BDS tracks both the number of different songs played in a week and the number of spins each song receives, it is possible to observe the amount of song repetition on BDS-monitored stations. As indicated in Table 4.14, the modern rock format has the highest amount of song repetition while heritage rock has the least. The repetition difference between these formats is expected since heritage rock generally plays music from a much larger catalog of songs spanning several decades. Modern rock, on the other hand, plays contemporary music typically released in the last year. And, as discussed above, record companies rely on heavy repetition of new songs in order to foster listener recognition. As a result, modern rock plays fewer unique songs. Like heritage rock, triple-A also has a very low song repetition because this format typically features a wide variety of music from several decades and several rock formats.

In addition to the variation in playlists between formats, the BDS data reveals that two factors influence song repetition within formats: ownership structure and market size. In terms of ownership structure, stations that are part of super group radio companies tend to have more song repetition and thus less playlist variation than individually-owned or small group radio companies. Song repetition is calculated as the number of unique songs on a station's weekly playlist (P) divided by the total number of songs played (S). A P:S ratio closer to 1 indicates a more varied playlist, while a ratio closer to 0 indicates greater song repetition. For example, in the modern rock format, Clear Channel, Infinity Broadcasting and Citadel Communications all have a lower P:S ratio than the format average of 0.197 in 2001 and 0.184 in 2002 (see Table 4.15). Stations that are

for a list of the rock stations in the BDS data set.

individually-owned or are part of station clusters of ten or less have a higher than average P:S ratio, indicating greater song variation, less repetition.

Table 4.15: Modern Rock Song Repetition by Ownership Structure

Ownership	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Clear Channel	11	0.176	12	0.173
Infinity Broadcasting	12	0.186	12	0.179
Citadel Communications	6	0.180	6	0.174
1 Station Owners	11	0.233	9	0.234
1 to 10 Station Owners	20	0.221	29	0.203
11 to 20 Station Owners	7	0.169	6	0.185
21 or more Stations Owners	42	0.177	46	0.172
50 or more Stations Owners	36	0.178	38	0.172
Total BDS Sample	75	0.197	81	0.184

In terms of market size, larger markets tend to have less song repetition and thus more playlist variation compared to smaller markets (see Table 4.16). Modern rock stations in the top ten markets had a higher P:S ratio than the format average of 0.197 in 2001 and close to the 0.184 average in 2002. Whereas, the smallest markets in the BDS sample had a lower than average P:S ratio for both years, thus indicating greater song repetition on those stations. The correlation between ownership and song variation remains evident when examining group owners within markets (see Table 4.17). Particularly in midsize and smaller markets, independent and small group owners have greater song variation than large group owners in the same market. In other words, audiences are more likely to hear a greater variety of songs if they tune in to radio stations that are not part of large ownership clusters, regardless of market size.

Table 4.16: Modern Rock Song Repetition by Market Size

Market	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Top 10 Markets	15	0.219	15	0.180
Markets 11-50	30	0.196	33	0.195
Markets 51+	30	0.187	33	0.175
Total BDS Sample	75	0.197	81	0.184

Table 4.17: Modern Rock Song Repetition by Market Size and Ownership Structure

Market and Ownership	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Top 10	15	0.219	15	0.180
Clear Channel	2	0.172	2	0.178
Infinity Broadcasting	5	0.212	5	0.199
1-50 Station Owners	6	0.228	5	0.173
Markets 11-50	30	0.196	33	0.195
Clear Channel	6	0.188	6	0.178
Citadel Comm.	2	0.192	2	0.178
Infinity Broadcasting	5	0.180	5	0.170
1-50 Station Owners	13	0.212	17	0.213
Markets 51+	30	0.187	33	0.175
Clear Channel	3	0.156	4	0.163
Citadel Comm.	4	0.174	4	0.165
Infinity Broadcasting	2	0.136	2	0.154
1-50 Station Owners	18	0.203	20	0.184
Total BDS Sample	75	0.197	81	0.184

In the other rock formats, ownership and market size influence playlist variation, but the relationships are not as strong and the factors are not as clear. Market size, more so than ownership structure, seems to influence playlist variation for the active rock stations in the BDS data set (see Tables 4.18 and 4.19). Playlist variation decreases as market size decreases, meaning that listeners in smaller communities hear more song repetition than listeners in major metropolitan areas. As discussed above, smaller markets tend to have greater concentration of ownership, with super group companies owning a larger portion of local stations than individual or small group radio owners. Although the data set is too small to determine significant trends, when playlist variation is examined within a market, some super group owners like Citadel, consistently have a higher P:S

ratio than the market average while other owners, notably Clear Channel, consistently have a lower P:S ratio (see Table 4.20).

Table 4.18: Active Rock Song Repetition by Ownership Structure

Ownership	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Clear Channel	16	0.229	17	0.208
Infinity Broadcasting	2	0.224	2	0.259
Citadel Communications	4	0.309	4	0.285
Cox Inc.	2	0.308	3	0.249
1 Station Owners	n/a	n/a	n/a	n/a
1 to 10 Station Owners	7	0.222	8	0.211
11 to 20 Station Owners	2	0.289	2	0.292
21 or more Station Owners	34	0.244	36	0.227
50 or more Station Owners	31	0.247	33	0.227
Total BDS Sample	43	0.243	46	0.227

Table 4.19: Active Rock Song Repetition by Market Size

Market	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Top 10	4	0.279	5	0.291
Markets 11-50	20	0.252	21	0.225
Markets 51+	19	0.225	20	0.213
Total BDS Sample	43	0.243	46	0.227

Table 4.20: Active Rock Song Repetition by Market Size and Ownership Structure

Market and Ownership	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Top 10	4	0.279	5	0.291
Clear Channel	1	0.240	2	0.279
Infinity Broadcasting	1	0.248	1	0.307
1-50 Station Owners	1	0.379	1	0.364
Markets 11-50	20	0.252	21	0.225
Clear Channel	7	0.238	7	0.191
Citadel Communications	1	0.327	1	0.289
Entercom	2	0.255	2	0.270
Cox Inc.	2	0.308	2	0.283
1-50 Station Owners	4	0.251	5	0.218
Markets 51+	19	0.225	20	0.213
Clear Channel	8	0.220	8	0.197
Citadel Communications	3	0.304	3	0.283
1-50 Station Owners	7	0.198	7	0.211
Total BDS Sample	43	0.243	46	0.227

A larger data set is necessary to fully examine the relationship between ownership and song repetition within markets of varying sizes. Song repetition may be connected to concentration, but without more stations and markets in the data set, it is not possible to confirm that relationship.

Heritage rock presents an inverse picture of the relationship between market size and playlist variation. Smaller markets actually have higher playlist variation than midsize and large markets (see Table 4.22). Given the small number of independent and small group owners in the heritage rock data set, it is difficult to compare the influence of ownership structure on playlist variation overall (see Table 4.21). However, it is evident that Citadel is the only super group owner with a higher P:S ratio than the format average. Furthermore, playlist variation within a market reveals that super group radio owners have a greater amount of song repetition than smaller owners in the same market (see Table 4.23).

Table 4.21: Heritage Rock Song Repetition by Ownership Structure

Ownership	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Clear Channel	35	0.332	36	0.315
Infinity Broadcasting	9	0.313	10	0.398
Citadel Communications	5	0.437	5	0.368
Cox Inc.	5	0.315	5	0.298
1 Station Owners	n/a	n/a	n/a	n/a
1 to 10 Station Owners	13	0.345	14	0.336
11 to 20 Station Owners	4	0.421	6	0.364
21 or more Station Owners	75	0.346	76	0.339
50 or more Station Owners	62	0.342	64	0.338
Total BDS Sample	92	0.349	96	0.341

Table 4.22: Heritage Rock Song Repetition by Market Size

Market	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Top 10	12	0.331	14	0.319
Markets 11-50	38	0.336	39	0.331
Markets 51+	42	0.366	43	0.356
Total BDS Sample	92	0.349	96	0.341

Table 4.23: Heritage Rock Song Repetition by Market Size and Ownership Structure

Market and Ownership	2001		2002	
	Stations	Average P:S	Stations	Average P:S
Top 10	12	0.331	14	0.319
Clear Channel	3	0.263	4	0.261
Infinity Broadcasting	3	0.303	3	0.296
1-50 Station Owners	4	0.376	5	0.370
Markets 11-50	38	0.336	39	0.331
Clear Channel	15	0.328	15	0.300
Infinity Broadcasting	5	0.308	6	0.441
Citadel Communications	1	0.329	1	0.260
1-50 Station Owners	11	0.354	11	0.306
Markets 51+	42	0.366	42	0.358
Clear Channel	17	0.347	17	0.340
Citadel Communications	4	0.464	4	0.395
1-50 Station Owners	15	0.369	15	0.369
Total BDS Sample	92	0.349	96	0.341

The three rock formats examined here each have different format expectations:

Heritage plays from a large catalog of older songs, modern features a smaller list of

contemporary songs, and active rock pulls from both contemporary and classic rock. Nevertheless, the individual playlists analyses demonstrate that similar trends in song repetition exist across the rock category: Ownership structure and market size influence playlist variation. Particularly revealing are the in-market analyses that show song repetition by ownership structure remains positively correlated. That is, as the size of the radio company increases, song repetition increases, even in smaller markets with a high degree of song repetition overall.

Uniqueness Factor

Another measure of content variation is the number of unique songs and artists played by a radio station that do not appear on any other station playlist. Using the BDS database, radio stations were assigned a point for each song on a playlist that was not listed on any other station playlist. In this way each station received a unique song and unique artist score. The mean averages for each company, ownership structure and market size were used to compare uniqueness factor across several dimensions.

Similar to the song repetition analysis discussed above, the uniqueness of a station's playlist can be correlated with two factors; ownership structure and market size. When the data set is parsed by ownership structure it is evident that small group owners with no more than 10 stations play more unique songs and artists than large group owners with 20 or more stations (see Table 4.24). Particular large group radio companies had higher unique song and artist scores than the sample average (Citadel Communication in 2002 and Infinity Broadcasting in 2001 and 2002), while Clear Channel Communication had much lower than average uniqueness scores for both years. In terms of market size,

smaller markets have significantly less uniqueness than midsize and large markets (see Table 4.25).

Table 4.24: Unique Artist and Song Score by Ownership Structure

Ownership	2001			2002		
	Stations	Unique Song Score	Unique Artist Score	Stations	Unique Song Score	Unique Artist Score
Clear Channel	64	4.969	0.766	66	4.561	0.895
Infinity Broad.	25	11.680	2.969	26	10.846	2.231
Citadel Comm.	16	6.816	1.625	15	17.200	6.600
1 to 10 Stations	55	15.636	3.727	60	18.217	4.950
20 or more stations	161	7.484	1.627	163	7.319	1.877
50 or more stations	136	6.706	1.331	139	7.360	1.906
Total Sample	230	9.578	2.161	244	10.403	2.663
Note: The unique song and artist scores listed are mean averages for each company or ownership structure.						

Table 4.25: Unique Artist and Song Score by Market Size

Market	2001			2002		
	Stations	Unique Song Score	Unique Artist Score	Stations	Unique Song Score	Unique Artist Score
Top 10	36	13.689	3.028	38	15.105	4.289
Markets 11-50	99	11.253	2.959	104	13.567	3.538
Markets 51+	95	6.295	1.000	98	5.439	1.173
Total Sample	230	9.578	2.161	244	10.403	2.663
Note: The unique song and artist scores listed are mean averages for each company or ownership structure.						

Within a market size, ownership remains an influence on uniqueness. Radio stations that are independently owned or part of small station clusters play songs and artists not heard on other stations more often than their large station group peers (see Table 4.26). This pattern is particularly significant in small markets where song repetition is high overall, but one to 10 station owners have unique artist and song scores three and four times greater than large group owners.

Table 4.26: Unique Artist and Song Score by Market Size and Ownership Structure

Market and Ownership	2001			2002		
	Stations	Unique Song Score	Unique Artist Score	Stations	Unique Song Score	Unique Artist Score
Top 10 Markets	36	13.689	3.028	38	15.105	4.289
Clear Channel	6	10.500	1.167	8	2.250	0.375
Infinity Broad.	10	14.700	3.100	10	12.600	2.200
1 to 10 stations	7	23.286	8.286	7	36.000	12.714
20+ stations	24	12.292	1.958	26	8.808	2.077
50+ stations	21	13.048	2.095	23	8.522	1.783
Markets 11-50	99	11.253	2.959	104	13.567	3.538
Clear Channel	30	4.767	0.967	29	5.759	1.138
Infinity Broad.	12	11.334	3.250	13	11.077	2.615
Citadel Comm.	4	11.250	3.500	4	50.750	26.250
1 to 10 stations	25	16.160	3.680	30	21.133	5.300
20+ stations	71	9.239	2.479	70	10.157	2.814
50+ stations	63	6.794	1.682	63	9.984	2.857
Markets 51+	95	6.295	1.000	98	5.439	1.173
Clear Channel	28	4.000	0.464	29	4.000	0.793
Infinity Broad.	3	3.000	0.333	3	4.000	0.667
Citadel Comm.	12	5.333	1.000	11	5.000	1.091
1 to 10 stations	23	12.739	2.391	23	9.000	2.130
20+ stations	66	3.848	0.591	67	3.776	0.821
50+ stations	52	4.03 8	0.596	53	3.736	0.830
Total Sample	230	9.578	2.161	244	10.403	2.663
Note: The unique song and artist scores listed here are mean averages by market and ownership structure.						

Summary of Changes to Content

This chapter began with an analysis of format changes that the FCC and industry organizations point to as evidence of increased diversity on radio in the wake of massive consolidation made possible by lifted ownership restrictions in the 1996 Telecommunication Act. While it is evident that most markets experienced greater format variation, this change was not as significant in small markets where ownership consolidation was most active and the composition of local owners most changed. In addition, while local variation may have increased, across the nation music programming was concentrated into a handful of formats that best serve the economies of scale benefits of super group owners. Furthermore, the use of format categories as a measure of

diversity is, itself, problematic. As the *Radio and Records* chart overlap analysis reveals, several distinct and related formats program similar music and thus the actual content that audiences hear may not be as diverse as the various format labels suggest. In light of these analyses, the causal relationship between concentration of ownership and increased content diversity proposed by the National Association of Broadcasters and the Federal Communications Commission needs critical reexamination. This is particularly urgent as the FCC is required to assess its ownership rules every few years and has used format variation studies as recently as 2003 to recommend continued deregulation of local ownership restrictions (Ahrens, 2003).

Studies of the diversity of radio programming would better serve the policy making community by investigating the actual playlists of stations across the country. Although historical data was unavailable and access was limited to one format category, a few important characteristics emerge from the sample of rock station playlists examined here: There is a relationship between programming and ownership structure and market size. Audiences will hear less repetition and more unique songs and artists on stations located in large markets and on stations that are independently owned or part of small radio groups. Within a large or small market, the relationship between ownership structure and programming remained. The least diverse programming, as measured by song repetition and song and artist uniqueness, was on stations in small markets owned by large radio companies.