

Preliminary Analysis for Diversity and Localism in Radio Playlists Study

The following represents very preliminary analysis comparing playlists from 245 radio stations. For this sample, the number of owners has fallen from 168 to 45 from March 1996 to March 2004. The playlists were taken from Radio and Records the first week in March, in 1996 and 2004. This preliminary analysis uses two metrics to gauge diversity among radio stations. First, we employ a distance metric that we developed in the biennial diversity paper. This metric, essentially, counts the number of songs (or artists) that are not contained in both playlists being compared between two radio stations. The analogue for a Venn Diagram would be the disjoint region of two sets. We use an even simpler measure, we simply count the number of songs and artists that appear on the playlists. Overall, while we find some modest evidence for diversity between playlists using our simple distance metric, the number of unique songs and artists has actually declined during this time period.

Table 1 compares the average distance measure across pairs of radio stations within a format such as Active Rock or Country. Essentially, our metric of diversity between two stations counts the number of songs or artists played on those station minus the number of songs or artists that are played on both stations. For songs, Table 1 shows that that our diversity metric increased in eight out of the twelve formats. In three cases, the average distance declined, while in one case (CHR RHY) the average distance roughly remained the same.

A similar comparison for artists yields a slightly different pattern, however. In six out of twelve cases, the average distance declined. In five cases, the average distance

between lists of artists on playlists roughly remained the same, while there was only one example where the average of our distance increased. The overall results suggest that while playlists may have grown more diverse with respect to songs, this has not been the case with respect to artists.

Table 2 shows the comparison between radio stations in different formats. For songs, we find that eight out of fifteen cases, radio station pair in different formats increased in distance or difference. In four cases they grew more similar and in three cases the distance measure stayed roughly the same. For artists, again, a different pattern emerges. Out of fifteen cases, five pairs of formats grew more distinct, five grew more distant, and five remained more or less at the same levels.

Overall, this suggests that the difference between playlists appears to be more due to different songs than artists.

Table 3 compares the artists and songs appearing on the Radio and Record playlists for 245 radio stations. Overall, the table shows that the number of different artists and songs played in the Top 10, Top 20, and Top 30 has appeared to decline from March 1996 and March 2004. For these stations, the number of distinct artists appearing on Top 20 and Top 30 playlists declined by 4.33 and 2.76 percent, respectively. The number of unique songs appearing on these playlists declined 4.27 and 6.26 percent, respectively. For Top 10 songs, the decline is steeper: the number of artists and songs declined 8.7 percent and 10.3 percent, respectively. This sample suggests that the most popular artists (and songs) are played more today than in 1996.

Another interesting feature of the playlists over this time period is that the number of plays for the Top 10, Top 20, and Top 30 lists have increased substantially. The

number of plays for the Top 30 lists have increased from 686 to 796, an increase in 16 percent. This means that the sum of the number of times songs have been played has increased for the time periods compared, March 1996 and March 2004. The number of plays for the Top 20 lists has increased similarly, from 552 to 642. The number of plays for Top 10 songs has increased even more, from 334 to 410, an increase of 22 percent.

Two possibilities can explain the increased amount of play for the top song lists. One possibility is that these radio stations are simply devoting more time to playing music. This is doubtful, however, because a number of industry studies have reported that the number of advertisements played throughout the radio industry has risen substantially during this time period. The other, more likely, possibility is that radio stations have been concentrating their play toward the more popular songs and artists. This also means that, unless the radio stations have been increasing the time allotted to music, which is doubtful, that artists that have received relatively lower amount of play before, have been reduced further or removed from the playlists.

The data we examine here does not contain the entire playlist of our sample of radio stations. Thus we cannot directly verify whether or not artists at the low end of the playlists have been cut or have their play reduced. There is a possibility that these artists are local artists, artists played on request, or perhaps reflecting the idiosyncratic tastes of local DJ's or program directors. The data we examine suggest, in conjunction with other reports that radio advertising has risen during this time period, that artists and songs at the low end of the playlists have been cut or seen their play time reduced further.

This sample of playlists suggests that songs appeared to decline by 16 percent from March 1996 to March 2004. The bottom row indicates that the number of owners

among these stations fell from 168 in March 1996 to 45 in March 2004, a decline of 73 percent.



Table 1
Average Distance Between Playlists for Radio Stations Within
the Same Format

Format	Artists		Songs	
	1996	2004	1996	2004
AAA	19.24	17.60	19.24	20.18
AC	11.07	10.37	11.07	13.66
ACT_Rock	12.06	11.96	12.06	17.01
Alternative	14.47	14.26	14.47	18.34
CHR_POP	17.65	11.78	17.65	13.33
CHR_RHY	17.01	14.19	17.01	17.08
Country	9.72	7.69	9.72	11.02
Hot_AC	11.02	11.21	11.02	15.19
Jazz	15.87	12.19	15.87	14.23
Rock	14.20	13.70	14.20	20.00
Urban	13.99	9.93	13.99	12.96
Urban_AC	9.36	11.71	9.36	15.95

Table 2
Average Distance Between Stations Using Different Formats

Formats		Artists		Songs	
		1996	2004	1996	2004
CHR_RHY	Urban	23.26	30.00	23.26	30.00
Urban	CHR_RHY	31.18	22.31	31.18	23.90
ACT_Rock	ACT_Rock	28.20	25.48	28.20	26.14
Rock	ACT_Rock	18.01	19.42	18.01	22.77
ACT_Rock	Rock	15.87	12.19	15.87	14.23
AC	Hot_AC	27.90	29.94	27.90	29.98
ACT_Rock	Alternative	29.95	28.05	29.95	28.05
Hot_AC	CHR_POP	16.09	26.78	16.09	28.37
Alternative	ACT_Rock	28.26	29.14	28.26	30.00
CHR_POP	Hot_AC	29.88	30.00	29.88	30.00
Rock	Alternative	14.47	14.26	14.47	18.34
Hot_AC	AC	11.07	10.37	11.07	13.66
Alternative	Rock	28.45	30.00	28.45	30.00
CHR_POP	Urban	29.89	30.00	29.89	30.00
Urban_AC	Urban	18.60	13.17	18.60	16.14