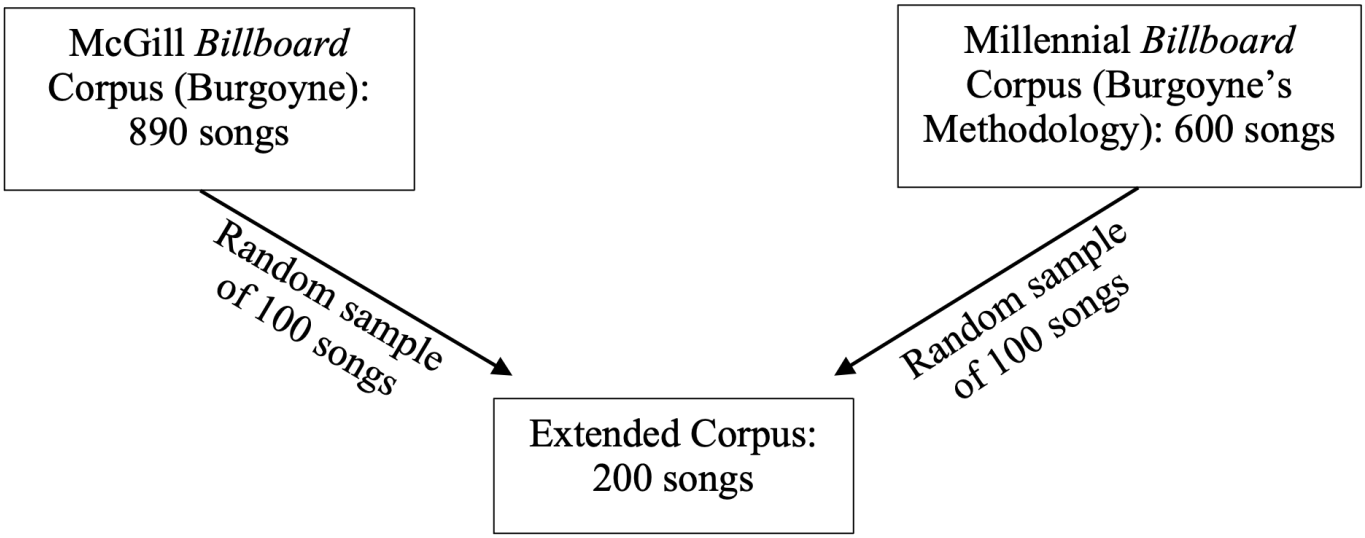
A JOURNAL OF THE SOCIETY FOR MUSIC THEORY

MTO 31.1 Examples: Schwitzgebel, "Cueing" Your Playlist

(Note: audio, video, and other interactive examples are only available online)
https://www.mtosmt.org/issues/mto.25.31.1/mto.25.31.1.schwitzgebel.html

Example 1. The breakdown of how Burgoyne's McGill *Billboard* and the corresponding Millennial Billboard are sampled to create the 200-song Extended Corpus



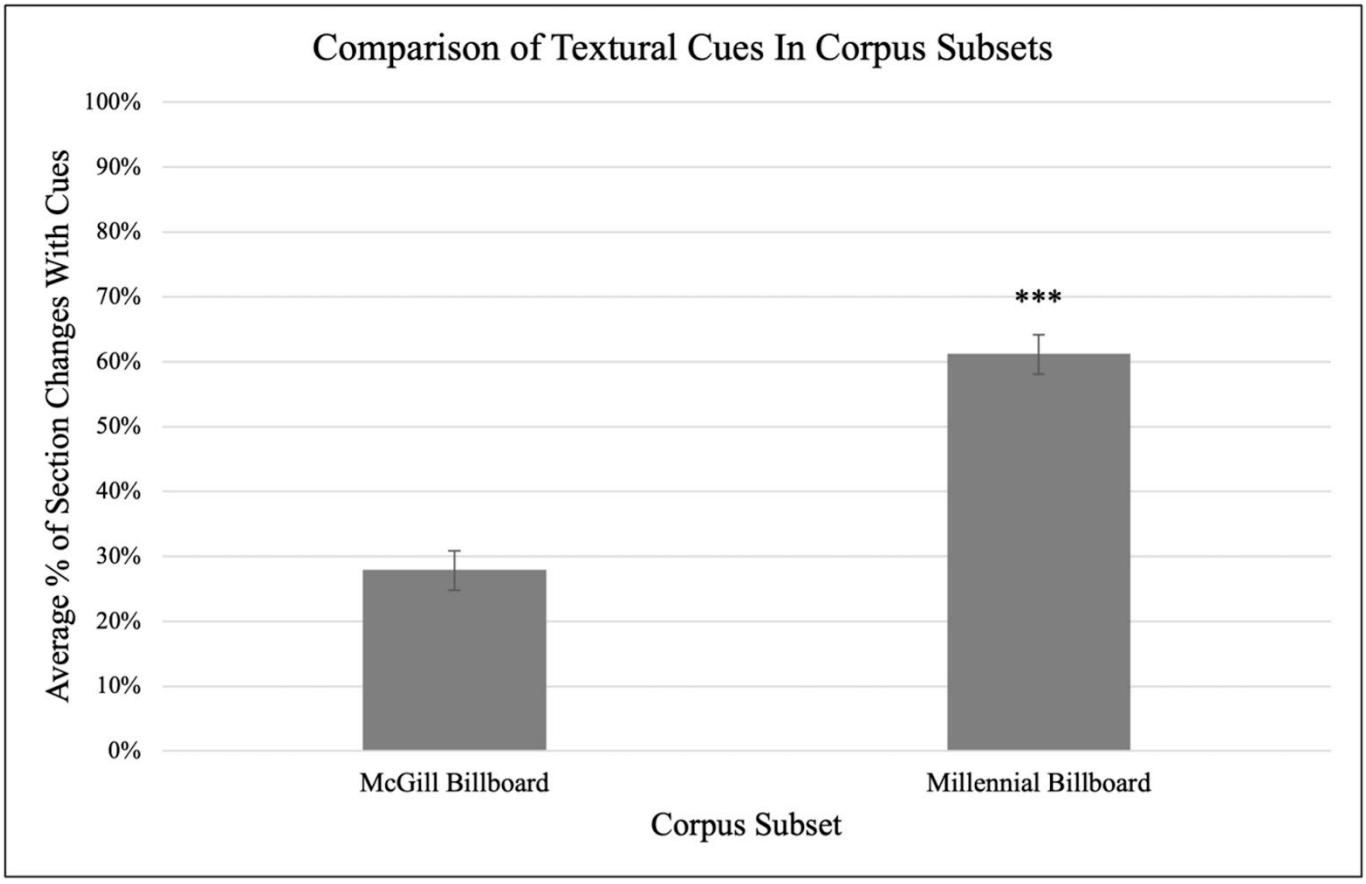
Example 2. The result of encoding "Crazy" (1993) by Aerosmith using the above-stated methodologies

intro>verse	0
verse>pc	1
pc>chorus	1
chorus>verse	1
verse>pc	1
pc>chorus	1
chorus>interlude	1
interlude>chorus	1
chorus>outro	1
89%	

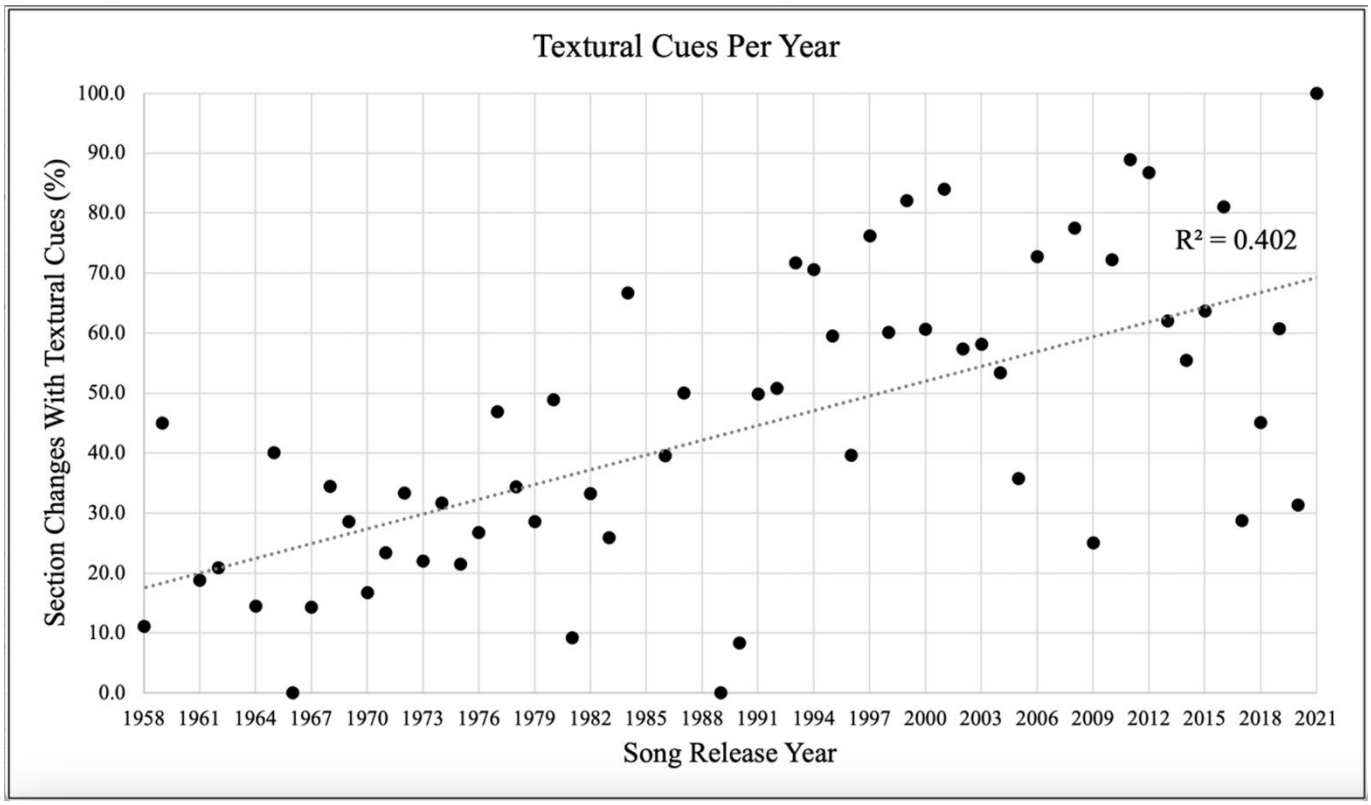
Example 3. Mean percentage of textural cues per song and standard deviation for each 100-song subset

	McGill *Billboard* Dataset	**Millennial *Billboard* Dataset**
Mean Percentage of Textural Cues	27.92%	61.22%
Standard Deviation	29.21%	31.52%

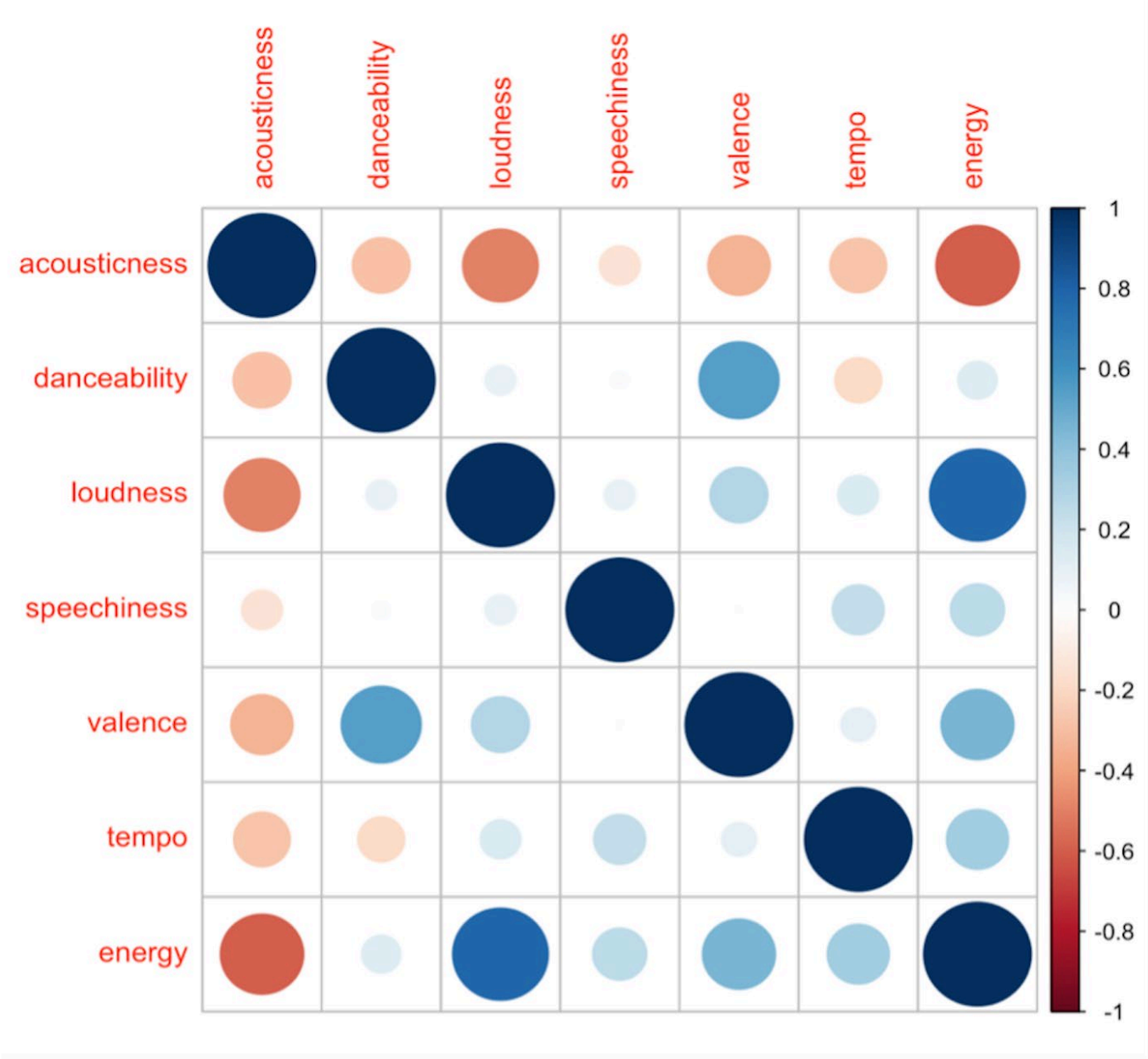
Example 4. A comparison of the McGill *Billboard* dataset sample with the Millennial Billboard dataset sample in the Extended corpus, showing the average percent of songs' section changes with textural cues. Asterisks indicate statistical significance, while error bars indicate standard deviation: here, the number of cues encoded in the Millennial subset is statistically different from the number of cues in the McGill subset, and error bars show the range of encoded cues in relation to the mean.



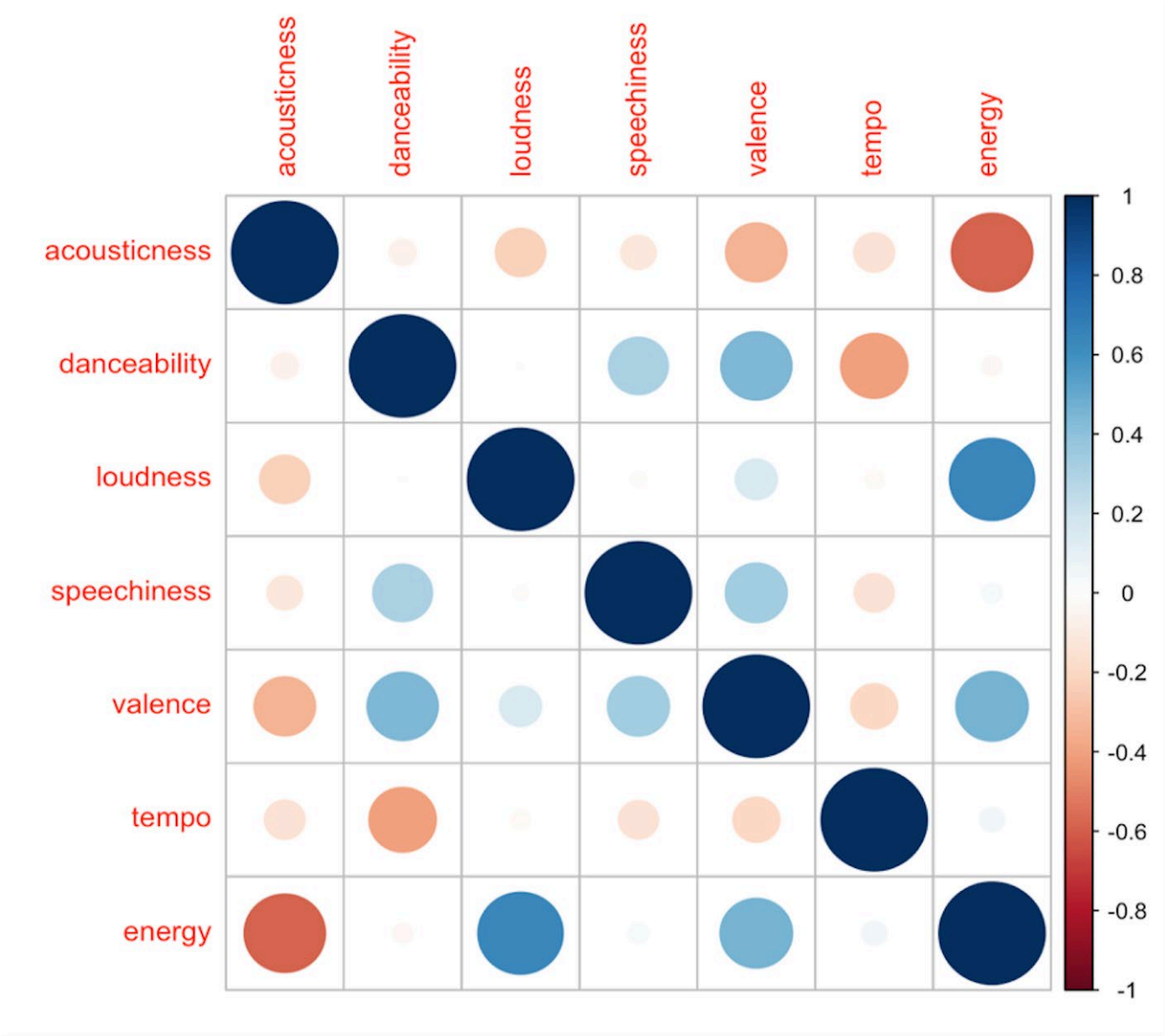
Example 5. Percentage of textural cues found at section changes for each song (y-axis) across 63 years of *Billboard* Hot 100 hits (x-axis). R^2 = .402; F(1, 59) = 39.67, p < .0001.



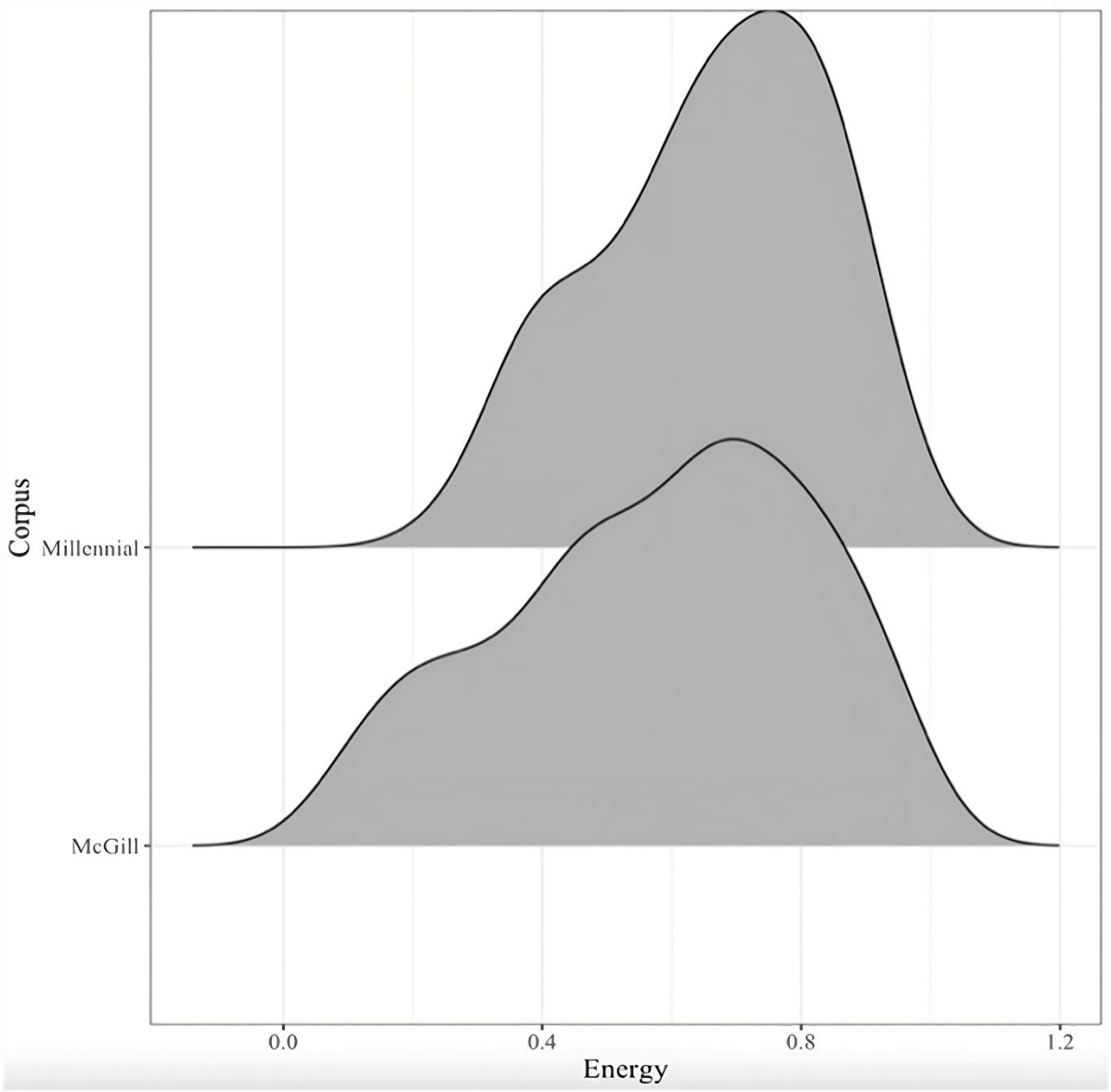
Example 6. Correlation plot for the McGill subset. Larger and darker circles show greater correlation between attributes, with red denoting a negative correlation and blue denoting a positive correlation.



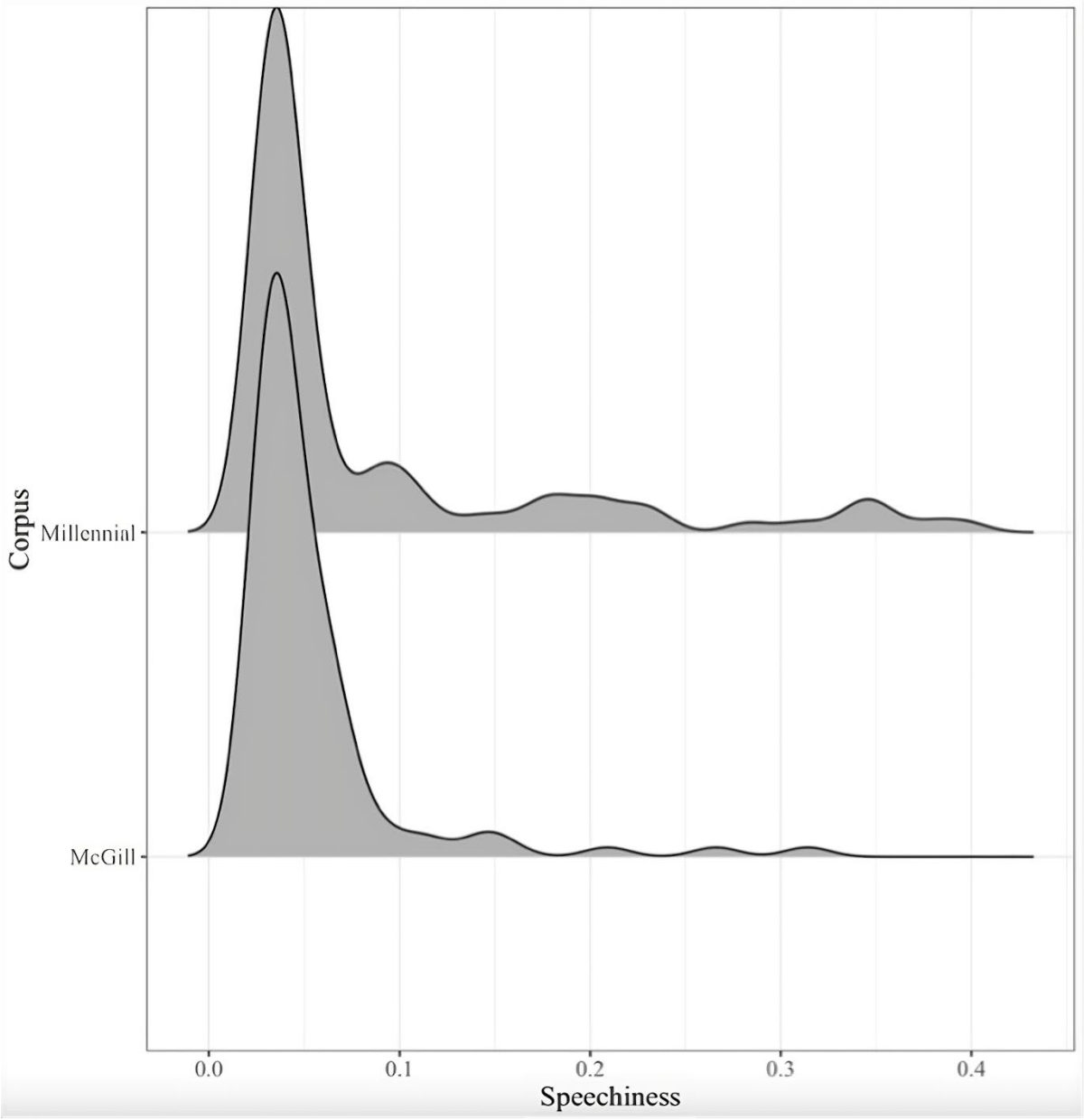
Example 7. Correlation plot for the Millennial subset. Larger and darker circles show greater correlation between attributes, with red denoting a negative correlation and blue denoting a positive correlation. Note that the correlations between tempo and energy, as well as energy and speechiness are correlated in the original McGill Billboard dataset, but not in the Millennial dataset. Similarly, speechiness and danceability, as well as valence and speechiness are correlated in the Millennial corpus but not in the McGill corpus.



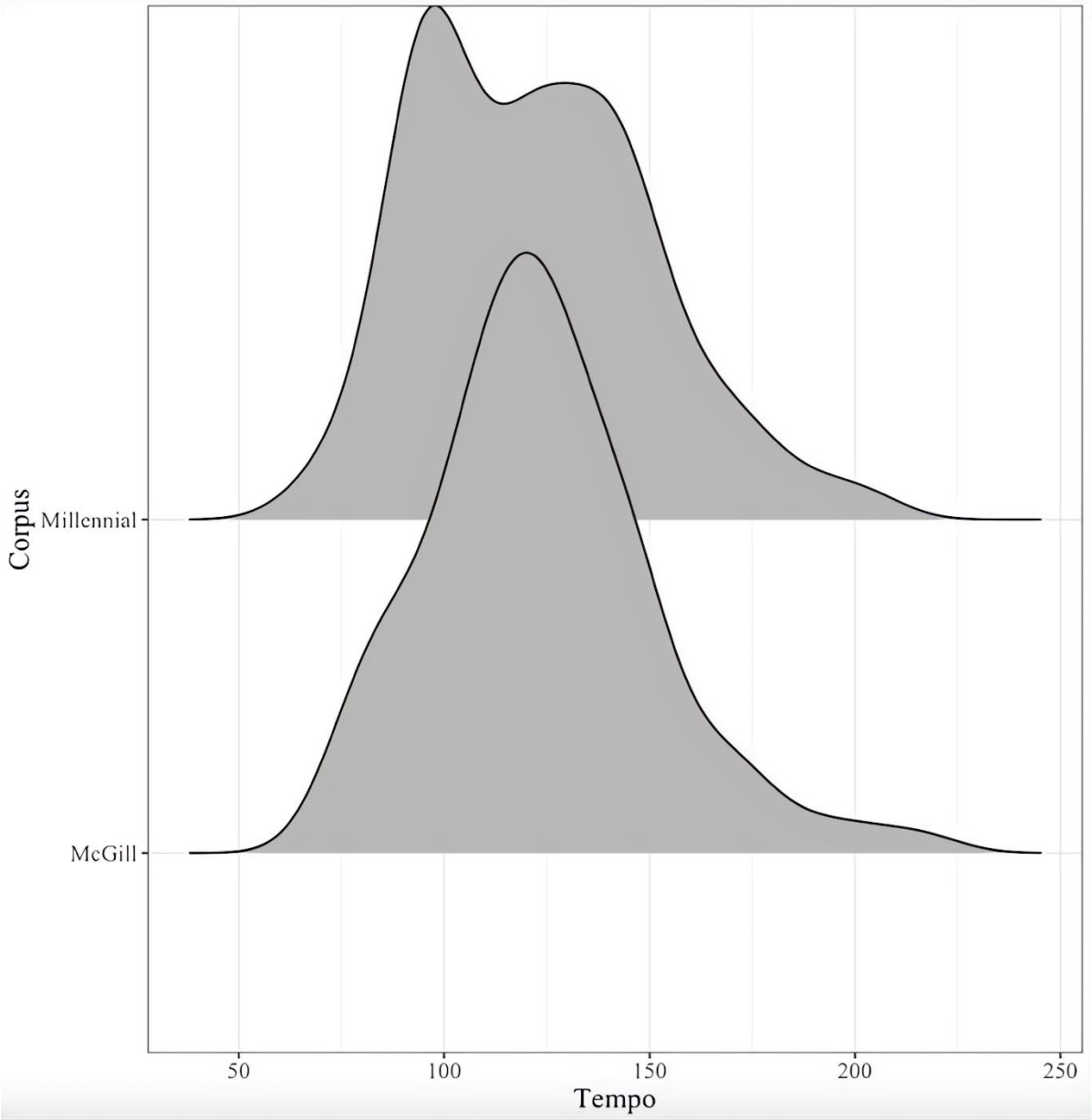
Example 8. Distribution of the energy feature for McGill and Millennial subsets



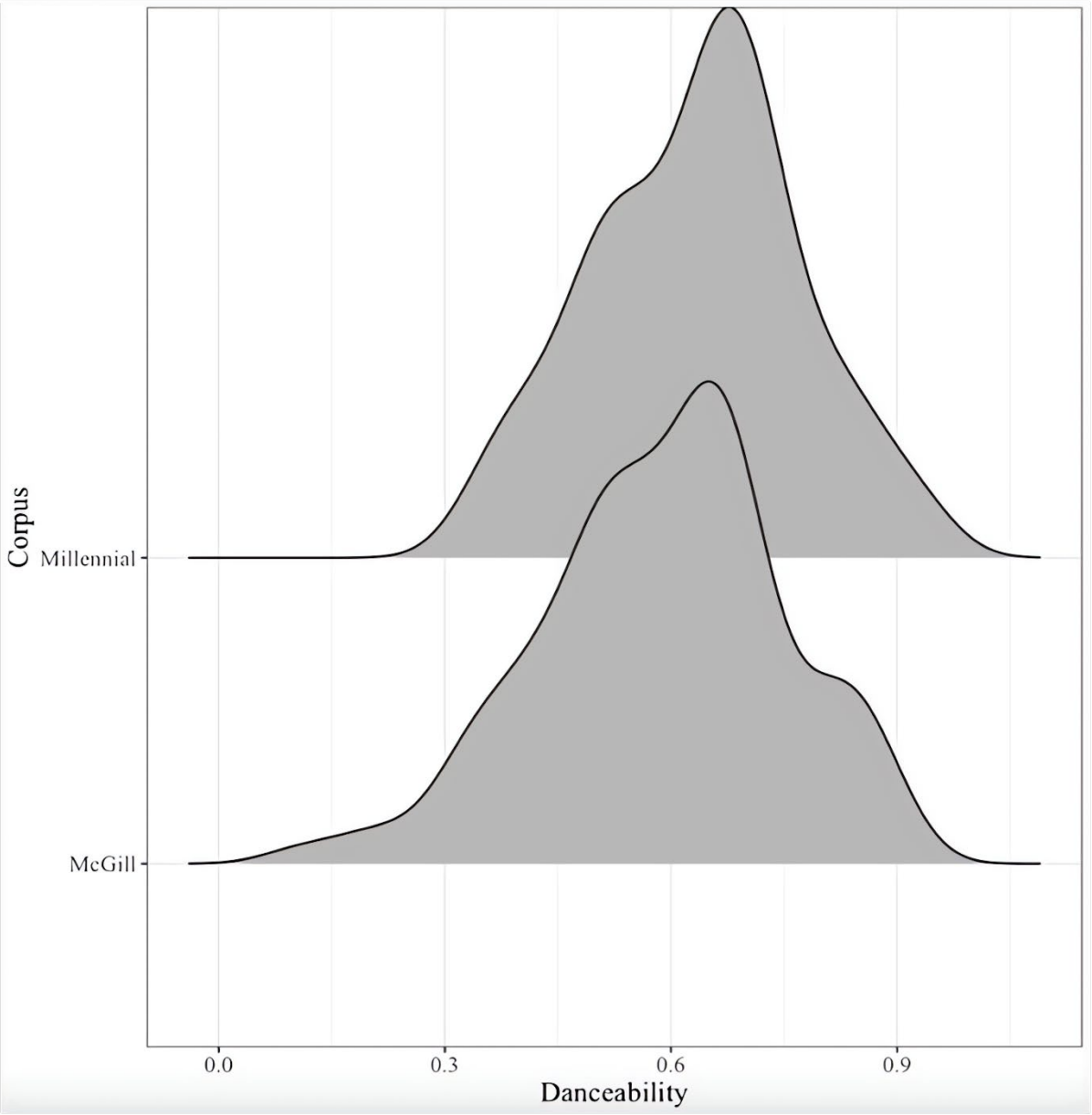
Example 9. Distribution of the speechiness feature for McGill and Millennial subsets



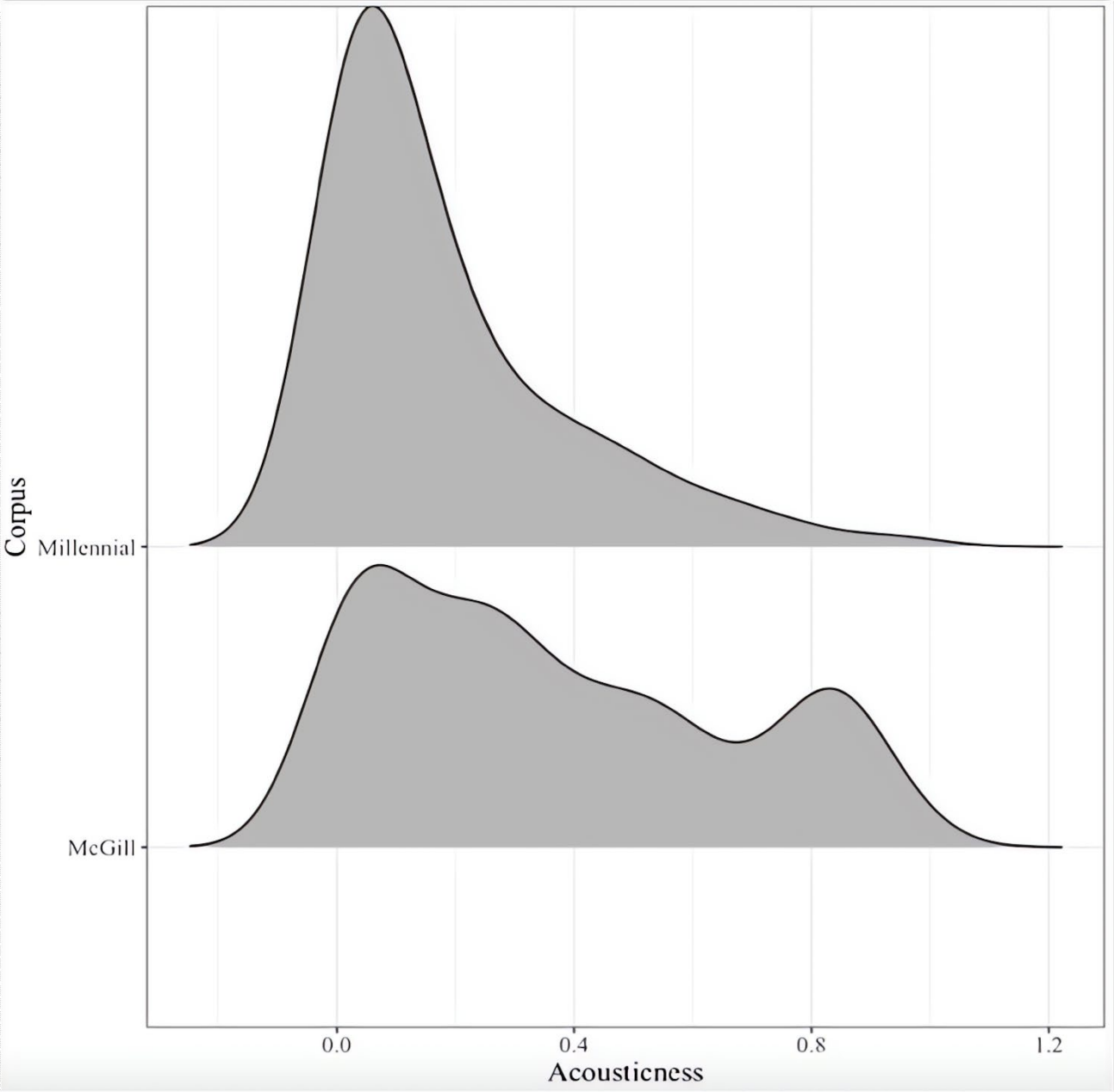
Example 10. Distribution of the tempo feature for McGill and Millennial subsets



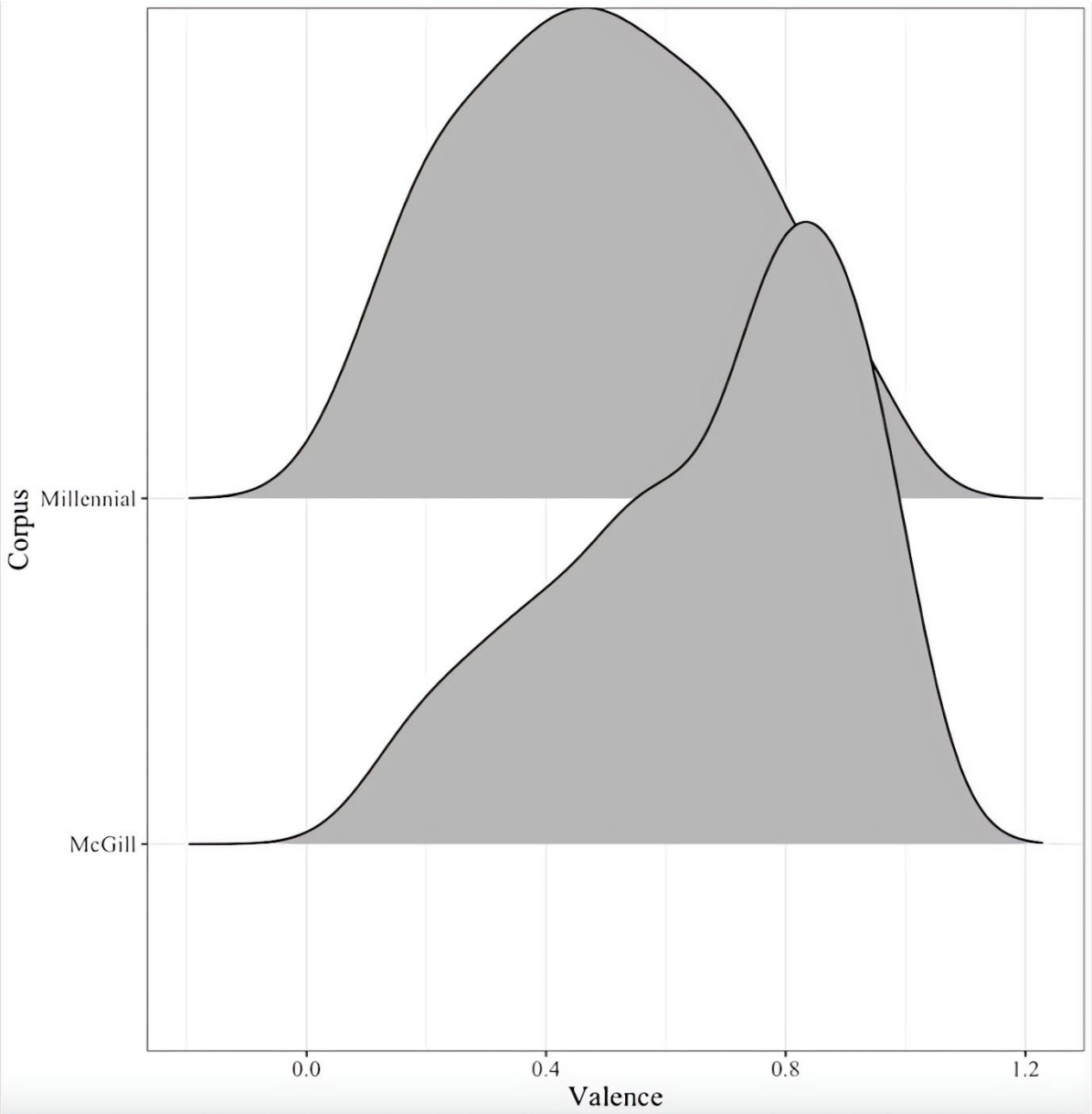
Example 11. Distribution of the danceability feature for McGill and Millennial subsets



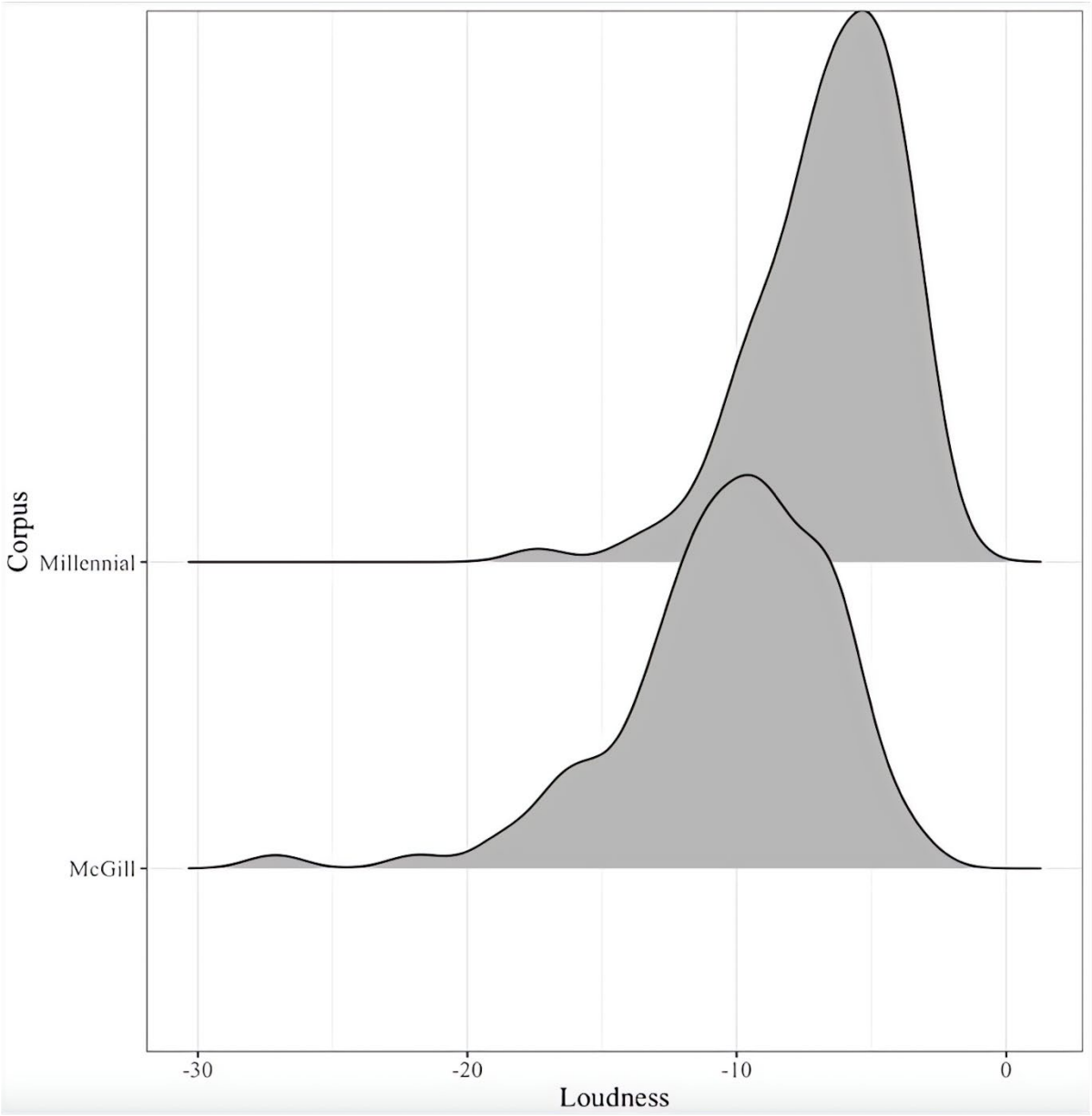
Example 12. Distribution of the acousticness feature for McGill and Millennial subsets



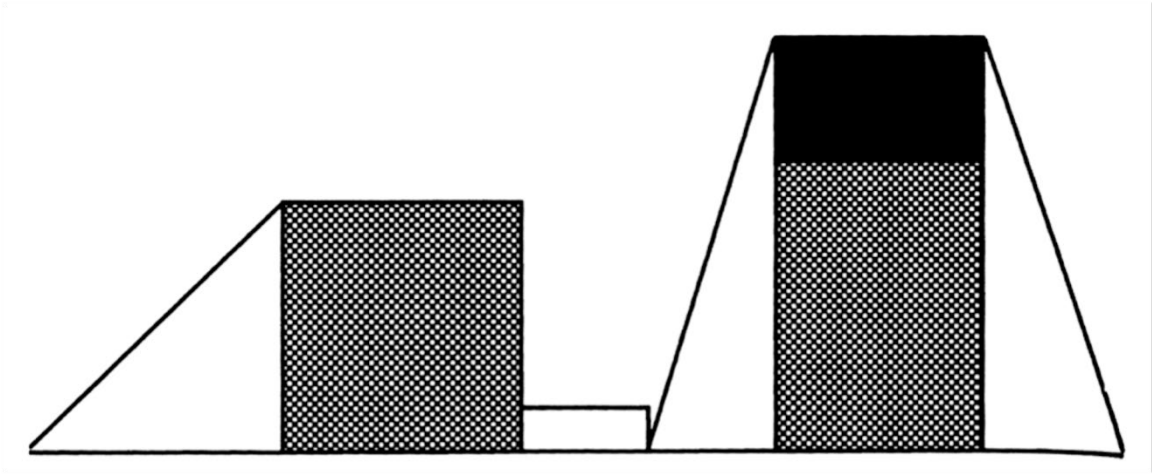
Example 13. Distribution of the valence feature for McGill and Millennial subsets



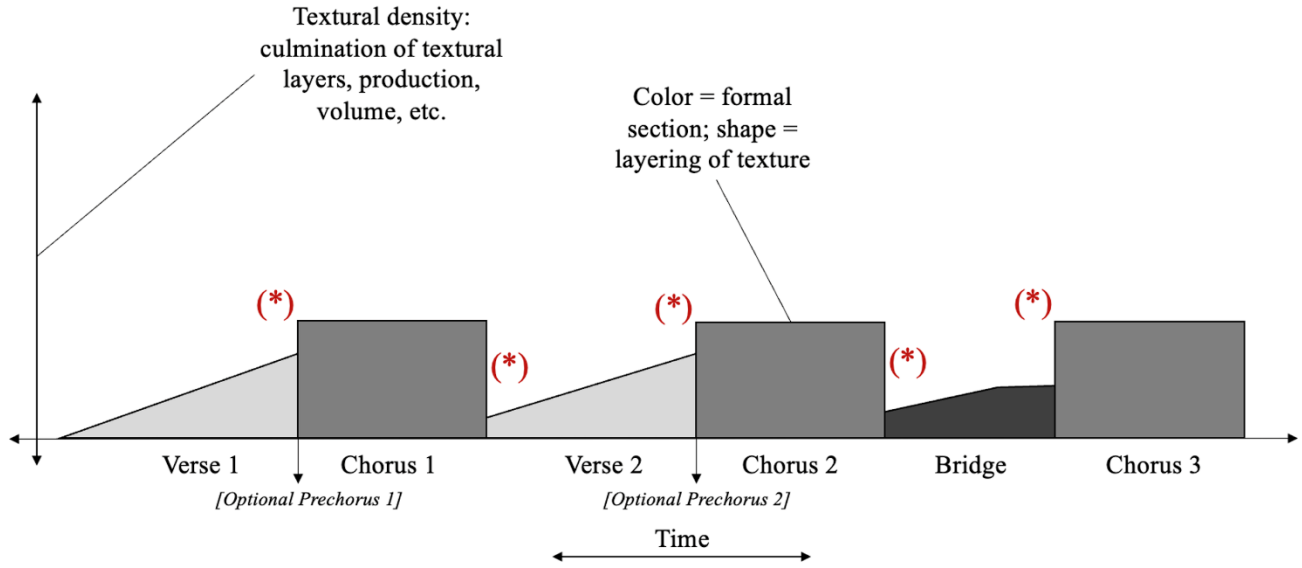
Example 14. Distribution of the loudness feature for McGill and Millennial subsets



Example 15. The prototypical form of an EDM song as shown in Butler 2006, 222



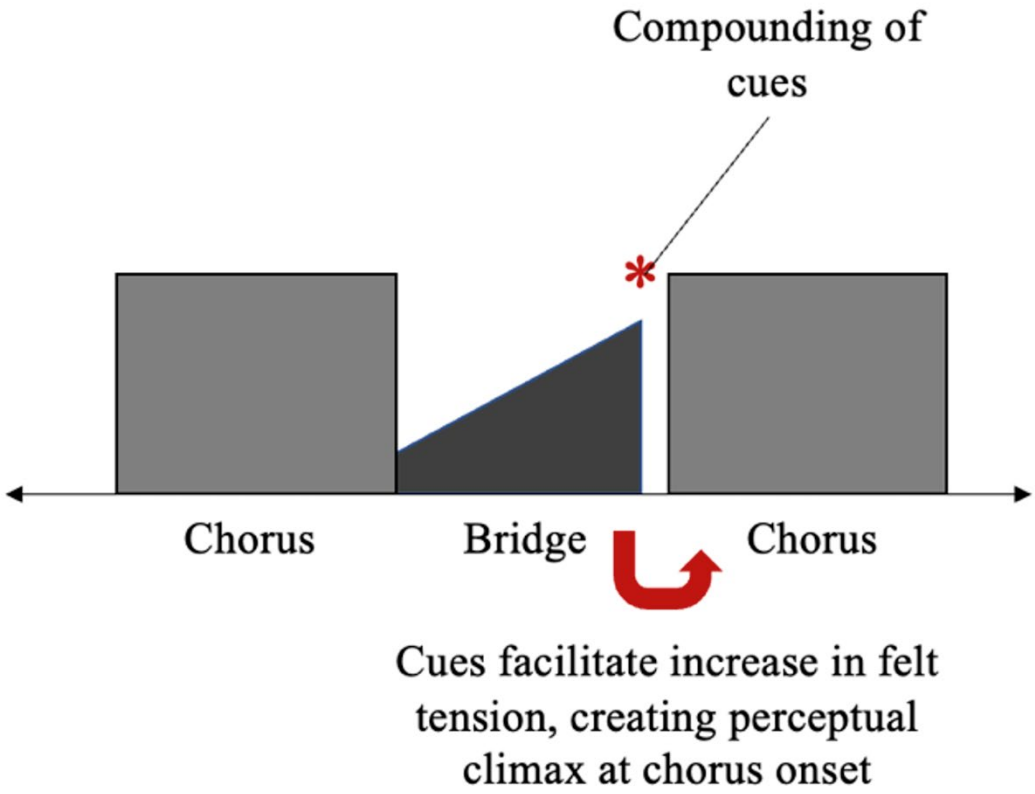
Example 16. An outline of the texture model with labels, where the x-axis shows a song's clock time, the y-axis shows textural density, color indicates formal section (coinciding with the labels underneath), shape indicates broadly the fluctuations of texture, and red stars indicate the most viable locations for textural cues to occur. I refer to this figure as "The Prototype."



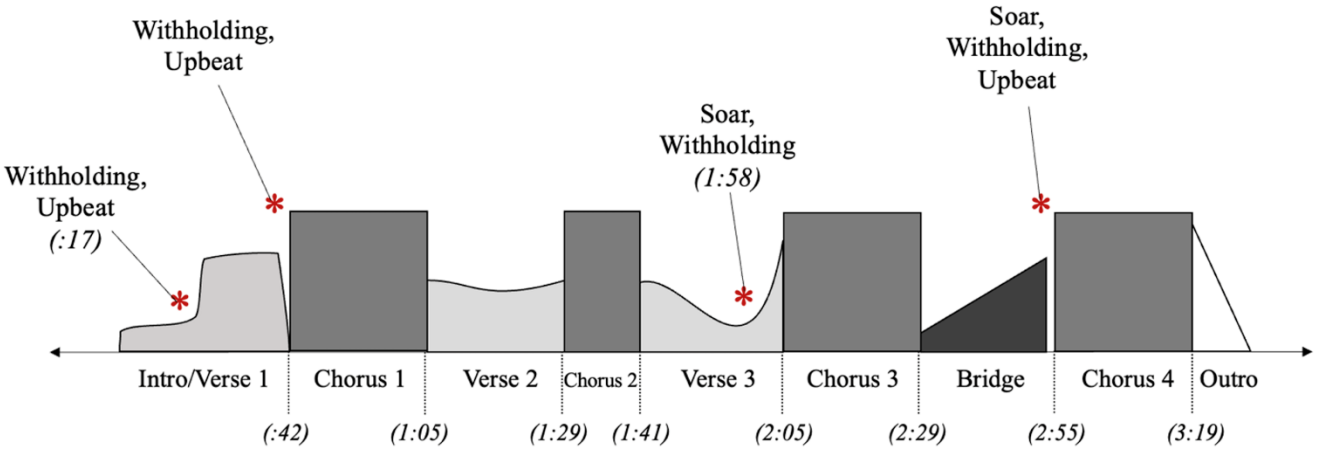
Example 17. *Billboard* Hot 100 information for five examples of "Prototype" songs

Song	Artist	Debut Date	Peak Ranking	Peak Date	# of Weeks on Chart
"Wasted On You"	Morgan Wallen	1/23/21	9	1/23/21	57
"Jaded"	Miley Cyrus	3/25/23	56	3/25/23	8
"Moonlight"	Kali Uchis	4/01/23	80	6/03/23	9
"IDGAF"	Dua Lipa	1/27/18	49	6/09/18	23
"Chemical"	Post Malone	4/29/23	13	4/29/23	8

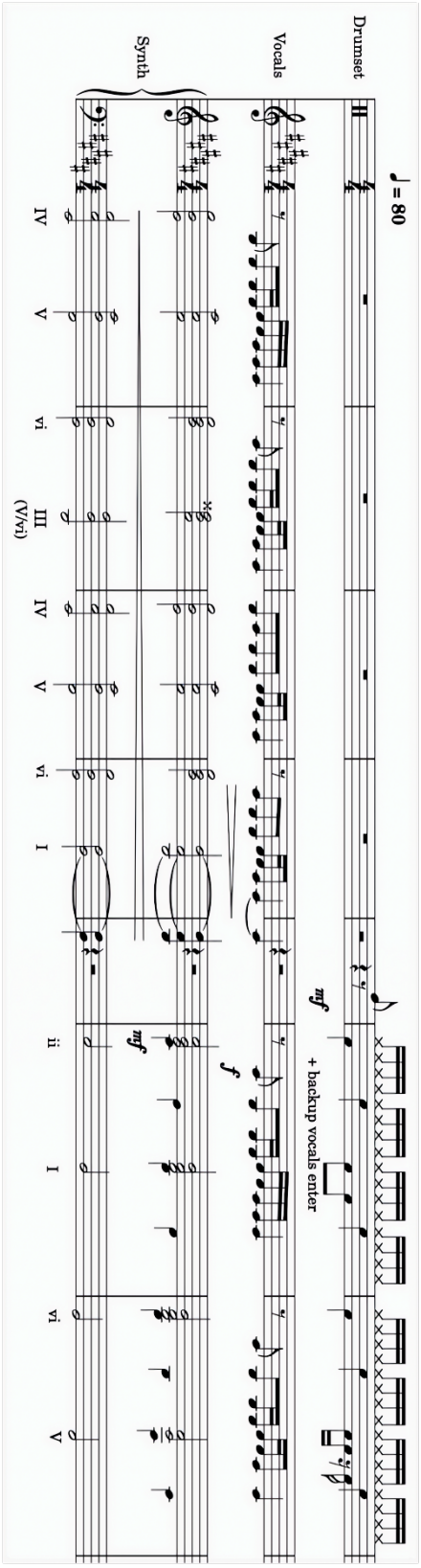
Example 18. Type 1: The Release



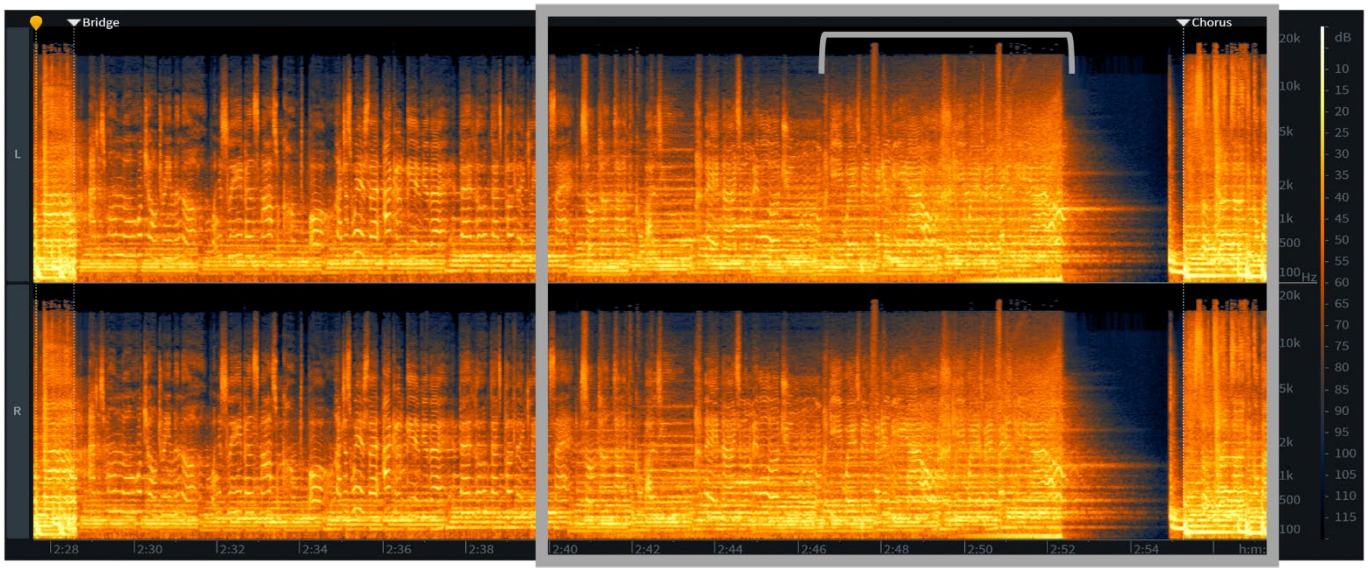
Example 19. A texture model of "Heat Waves" by Glass Animals, with sectional timestamps. Red stars indicate the location of textural cues, with their categories labeled above the figure. Accompanying audio coincides with the beginning of the song through the end of the first chorus, including the cued removal of the filter at 0:17 and the cued texture change from verse to chorus (0:00–1:05).



Example 20. A score representation of Glass Animals' "Heat Waves." Four measures of build-up in the bridge followed by a compounding of textural cues that lead into the final chorus in the sixth measure. Accompanying audio coincides with the end of the bridge into the final chorus (2:40-3:01) to exemplify The Release.



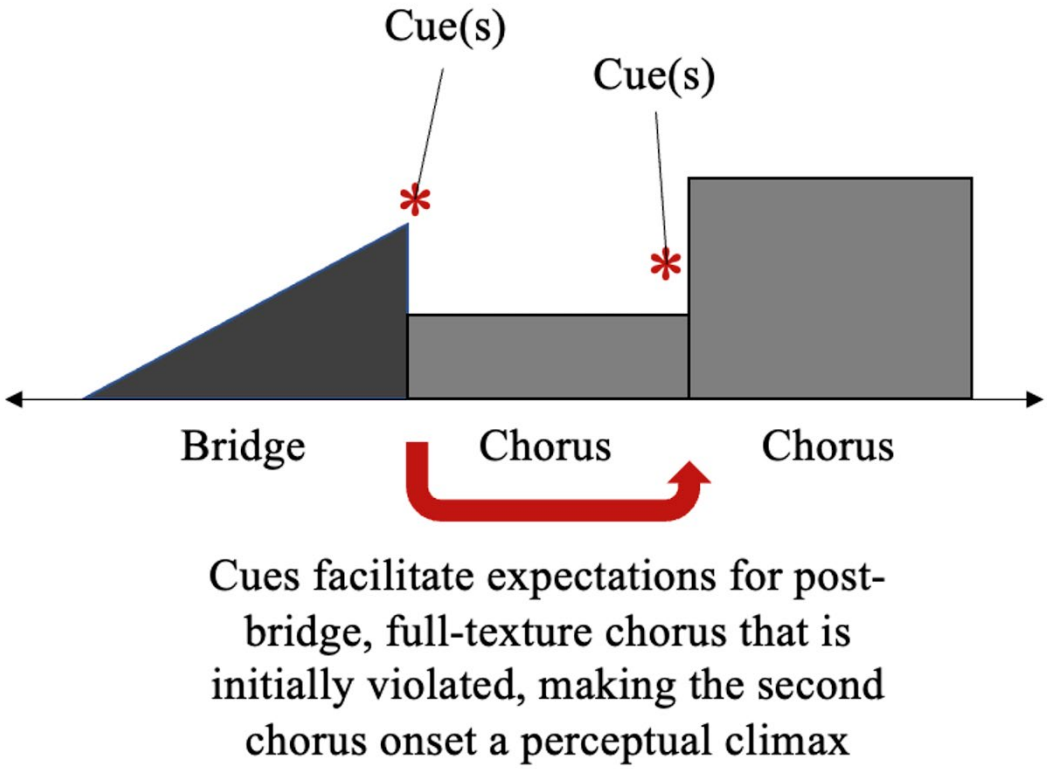
Example 21. A spectrogram of "Heat Waves," zoomed to focus specifically on the bridge→chorus section. The gray box encompasses the music notated in Example 20, while the gray bracket highlights the inclusion of higher frequencies as heard in the melodic soar cue.



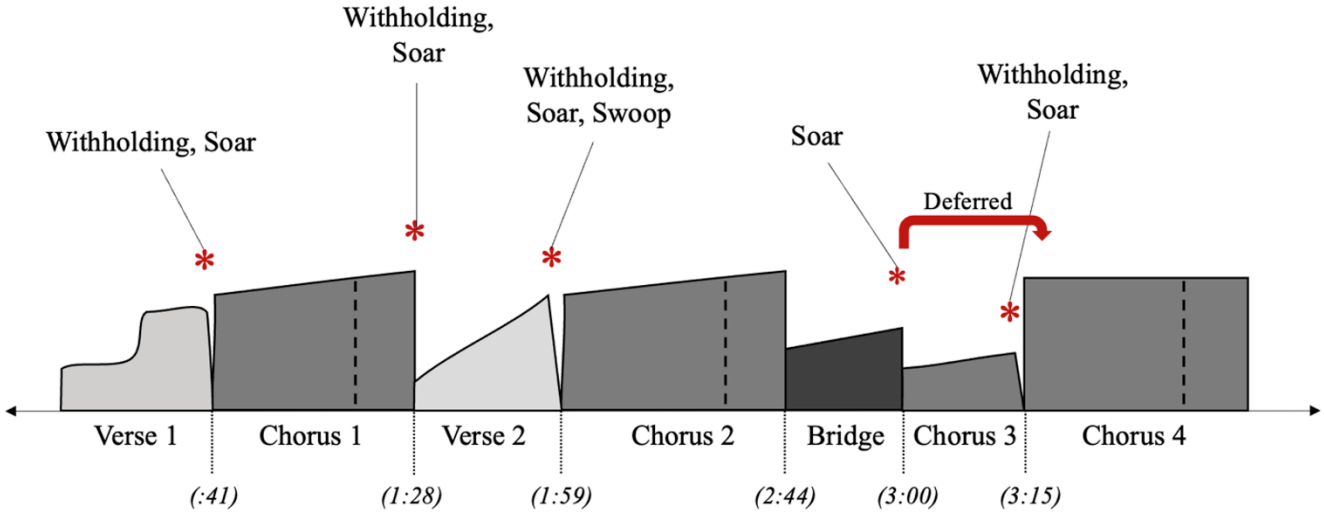
Example 22. *Billboard* Hot 100 information for five examples of Type 1: The Release songs

Song	Artist	"Release" Time Stamp	Debut Date	Peak Ranking	Peak Date	# of Weeks on Chart
"Heat Waves"	Glass Animals	2:52	7/10/21	2	8/28/21	56
"Cruel Summer"	Taylor Swift	2:01	9/07/19	29	9/07/19	5
"Done For Me"	Charlie Puth Featuring Kehlani	2:22	5/19/18	53	5/26/18	9
"To Die For"	Sam Smith	2:27	2/29/20	46	2/29/20	6
"Therefore I Am"	Billie Eilish	2:25	11/21/20	2	11/28/20	27

Example 23. Type 2: The One More Time



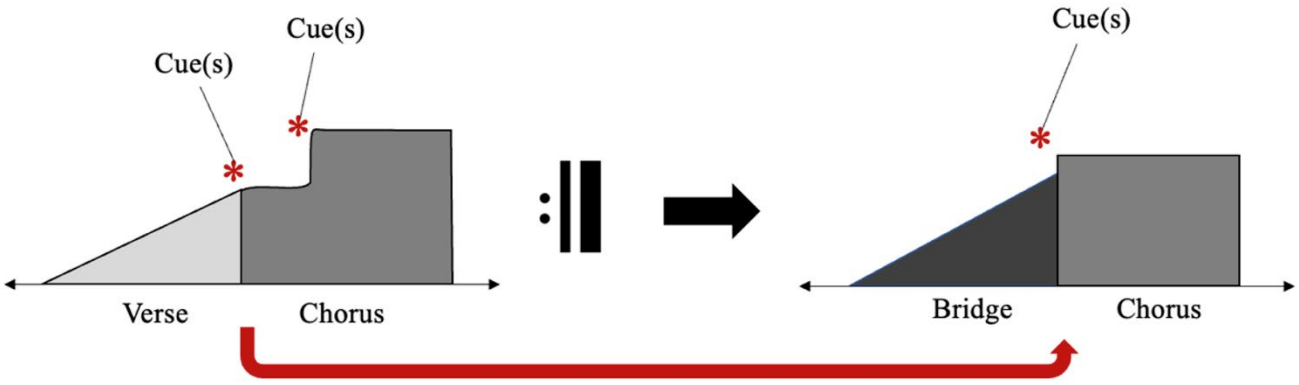
Example 24. A texture model of "Bad Habits by Ed Sheeran. Red stars indicate the location of textural cues, with their categories labeled above the figure; the red arrow indicates the teleological delay of expectations after the bridge; the vertical dashed lines in chorus sections delineate a post-chorus section. Accompanying audio coincides with the start of the bridge lasting until midway through the final chorus, exemplifying The One More Time in this song (2:44–3:21).



Example 25. Billboard Hot 100 information for five examples of Type 2: The One More Time songs

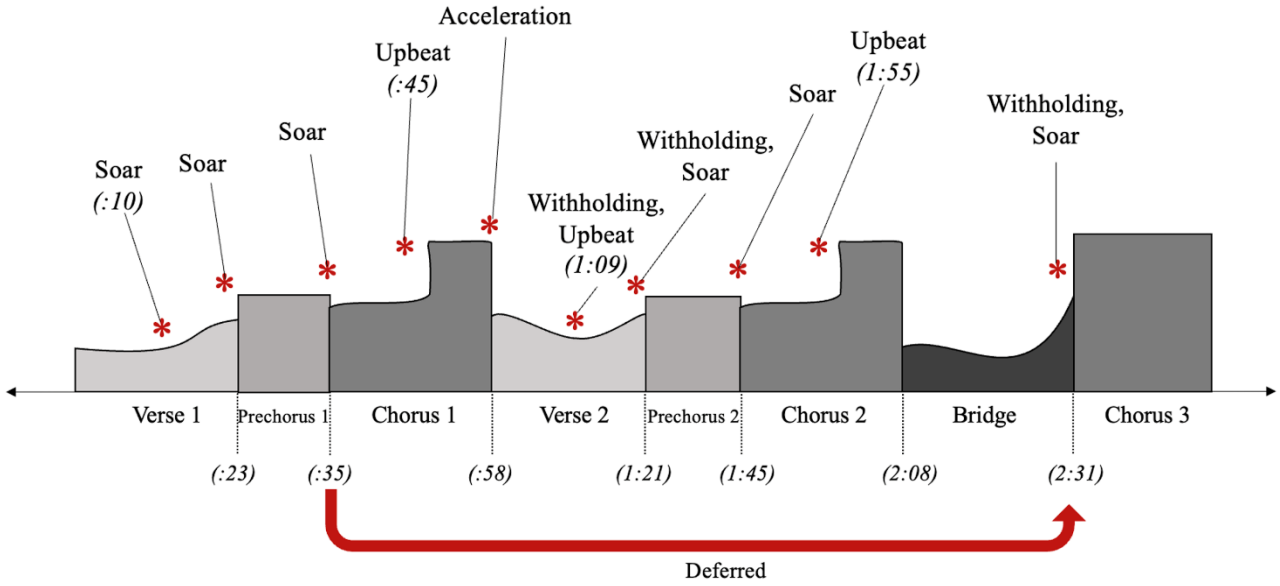
Song	Artist	"One More Time" Time Stamps	Debut Date	Peak Ranking	Peak Date	# of Weeks on Chart
"Bad Habits"	Ed Sheeran	3:00/3:15	1/16/21	1	3/12/22	91
"good 4 u"	Olivia Rodrigo	2:24/2:36	5/29/21	1	5/29/21	51
"High Hopes"	Panic! At The Disco	2:20/2:43	6/09/18	4	1/26/19	52
"If I Can't Have You"	Shawn Mendes	2:38/2:53	5/18/19	2	5/18/19	23
"Stick Season"	Noah Kahan	2:19/2:35	10/29/22	14	10/29/22	28

Example 26. Type 3: The Stairstepper



Cues facilitate expectations for full-texture chorus that is met only in the second half of the first chorus, but at the start of the final chorus, creating perceptual climax

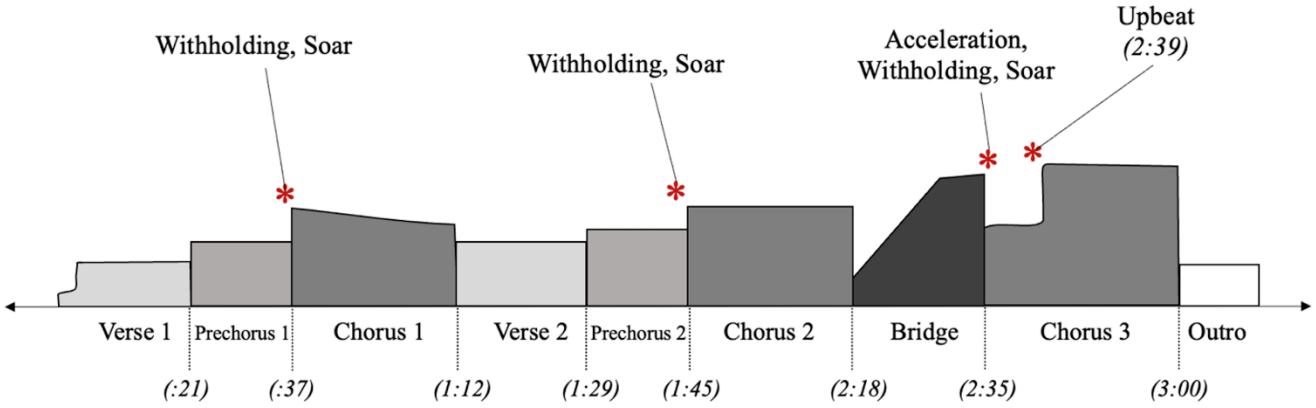
Example 27. A texture model of "So Good" by Halsey. Red stars indicate the location of textural cues, with their categories labeled above the figure; the red arrow indicates the teleological delay of expectations from the first to last chorus. Accompanying audio coincides with the start of the song through the first chorus, to showcase the first instance of the textural staircase (0:00–0:59).



Example 28. *Billboard* Hot 100 information for five examples of Type 3: The Stairstepper songs. Songs marked with (*) are considered the "Escalator" sub-type (see [3.14]).

Song	Artist	"Stairstepper" Time Stamps	Debut Date	Peak Ranking	Peak Date	# of Weeks on Chart
"So Good"	Halsey	:47→2:31	6/25/22	51	9/24/22	16
"Daisies"	Katy Perry	:43→2:17	5/30/20	40	5/30/20	7
"Lose You To Love Me"*	Selena Gomez	:47→2:39	11/02/19	1	11/09/19	23
"Love Of My Life"*	Harry Styles	:16→2:10	6/04/22	29	6/04/22	2
"What A Man Gotta Do"*	Jonas Brothers	:28→2:20	2/01/20	16	2/01/20	12

Example 29. A texture model of "Anyone" by Justin Bieber. Red stars indicate the location of textural cues, with their categories labeled above the figure. Accompanying audio coincides with the start of the bridge through the textural "Stairstepper" moment of the final chorus (2:18–2:44).



Example 30. *Billboard* Hot 100 information for five examples of Type 4: The Hybrid songs

Song	Artist	Debut Date	Peak Ranking	Peak Date	# of Weeks on Chart
"Anyone"	Justin Bieber	1/16/21	6	1/16/21	17
"Liar"	Camila Cabello	9/21/19	52	11/02/19	11
"Creepin' (with The Weeknd and 21 Savage)"	Metro Boomin, The Weeknd, 21 Savage	12/17/22	3	2/11/23	27
"Kill Bill"	SZA	12/24/22	1	4/29/23	26
"Undrunk"	FLETCHER	3/23/19	61	4/06/19	6