

A text mining approach to the use of “groove” in everyday language

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Abstract

When speaking about music, the term *groove* can refer to objective qualities, such as rhythmic patterns, or to subjective experiences, such as the pleasurable urge to move to the music. However, the mere juxtaposition of objective musical causes and subjective psychological effects may be too simplistic to fully capture the multifaceted groove phenomenon. We therefore broaden the perspective of groove research by analyzing how people use the term *groove* in the everyday language of 970,220 comments on 155 YouTube music videos. The corresponding songs were previously rated on groove, operationalized as a pleasurable urge to move. Results show that *groove* terms were more likely to be used in comments on songs that received higher groove ratings. Resonating with the definition of groove as a pleasurable urge to move, *groove* terms were very likely to co-occur with *movement* terms, and comments mentioning *groove* expressed more positive sentiments. We also found that *groove* terms were predominantly used to describe objective musical qualities in comments on funk, soul, and R&B songs, suggesting that the use of groove is related to genre. In general, we demonstrate how text mining can be used to review existing definitions and gain new perspectives on current topics in music science.

Keywords

groove, popular music, language use, YouTube comments, text mining

All around the world, music is regularly used to accompany social gatherings, for example, collaborative work (Gioia, 2006), sports (Terry et al., 2020), celebrations and rituals (MacDonald, 2021), and dance (Mehr et al., 2019). In many of these situations, music provides a temporal

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structure that allows for the coordination of body movement across individuals. An important concept in rhythm perception and movements to music is groove, which can refer not only to objective musical qualities, such as specific rhythmical patterns or certain musical genres, but also to subjective experiences, such as the urge to move with the rhythm, the experience of pleasure, or a flow-like state of being. In the current study, we investigate how the term *groove* is used in reactions to music in peoples' everyday lives and relate these uses to academic definitions of groove.

In the field of musicology, groove is often connected to African-American musical styles such as funk, soul, jazz, and R&B (Câmara & Danielsen, 2020; Iyer, 2002; Pressing, 2002). However, even within these genres and within the field of musicology, groove can have different meanings; the term may refer to a repetitive multilayered pattern of pitch and rhythm (Zbikowski, 2004), the engagement of synchronized body movements arising from such repetitive patterns (Pressing, 2002; Zbikowski, 2004), or the seemingly effortless interactions and “negotiations” of expressive timing between musicians in a band (Keil, 1995). All of these definitions can be categorized into two dimensions: an objective dimension of structured sounds and a subjective, experienced, phenomenological dimension (Duman et al., 2021).

Most studies in the field of music psychology have focused on the experienced dimension of groove. Madison (2006) defined groove as “wanting to move some part of the body in relation to some aspect of the sound pattern” and showed that groove can be experienced in a wide range of musical genres with considerable interindividual consistency. When participants used their own definitions of groove in a study by Janata and colleagues (2012), groove ratings were positively associated with enjoyment of the music, spontaneous body movement, and ease of sensorimotor synchronization. The tight links between body movement, pleasure, and groove have also been demonstrated in neurophysiological studies. Stupacher and colleagues (2013) used transcranial magnetic stimulation and electromyography to show that high-groove music affected motor cortex excitability more strongly than low-groove music (Stupacher et al., 2013). Matthews and colleagues (2020) used functional magnetic resonance imaging to show that the experience of groove is associated with activity in motor-related and reward-related networks in the brain. Following these behavioral and neurophysiological findings, the experienced dimension of groove can be described as a pleasurable urge to move.

Recent studies suggest that the mere juxtaposition of objective musical causes and subjective psychological effects may be too simplistic to fully capture the groove phenomenon. Studies have shown that the groove experience is moderated by the personal background of the listener, such as their musical taste or familiarity with the repertoire (Senn et al., 2021), by the concrete listening situation, such as live versus recorded music (Swarbrick et al., 2019), and by feelings of social connectedness, immersion, flow, and energetic arousal (Dotov et al., 2021; Duman et al., 2021, 2022; Kowalewski et al., 2020; Senn et al., 2023; Stupacher, 2019), indicating that the groove experience is complex and multifaceted (Senn et al., 2019).

One way to broaden the perspective of groove research is to analyze how people actually use the term *groove*. A previous study used free-form interview data to show that the term *groove* is used in a nuanced and multifaceted way by listeners (Hosken, 2020). An expert interview study showed that musicians working in popular music use *groove* for describing musical objects and subjective experiences alike, and that they do so with high interindividual consistency (Bechtold et al., 2023). Besides these two interview studies, semantic work on how the term

groove is used in spontaneous reactions to music is scarce. In the current study, we therefore investigate how the term *groove* is used in everyday language by tapping into the rich source of spontaneous verbalized reactions found in the commentary threads of music videos on YouTube. Online streaming services, such as YouTube, are currently the most preferred music listening format: Although online streaming accounted for only 5% of the U.S. music industry revenue in 2009, it increased to 79% in 2019 (RIAA, 2020). YouTube provides a naturalistic and culturally diverse platform for eliciting public opinion. In their commentaries, YouTube users provide information, share immediate reactions, give opinions, express feelings, and relate videos to their own life situations or stories (Madden et al., 2013). This data can, for example, be used for term frequency comparisons or sentiment analyses. As Thelwall (2018, p. 314) notes, these types of “social media analytics methods are almost inevitably exploratory” and offer a valuable addition to more traditional and systematic research methods.

In this study, we employ a text-mining approach with theme searches and sentiment analyses to study how the term *groove* is used in the comment sections of 155 music videos on YouTube. The songs are selected from a previous study with groove ratings, operationalizing groove as a pleasurable urge to move (Senn et al., 2021). The juxtaposition of commentaries and groove ratings allows us to analyze how the vernacular and academic uses of the groove concept relate to each other. This expands the academic discourse on groove, which commonly focuses either on genre-related objective qualities, or genre-independent subjective experiences.

Method

Stimuli

We used a list of 207 songs that were previously rated on groove (Senn et al., 2021). Senn and colleagues used representative 15–30 s excerpts of these songs and operationalized groove as a combination of three ratings, targeting movement induction, experience of pleasure, and the music’s appropriateness for a party without directly mentioning the term *groove*. If available, we selected the official video of a song or alternatively the video with the most views on the YouTube platform. Seven videos had more than 100,000 comments; for data processing reasons we selected the video with the second most views of the same song. Fifty-two of the YouTube videos were excluded from the analysis because they had less than 100 comments by December 2021 or did not feature a studio recording of the song. The final sample consisted of 155 videos with 100 or more comments (see Appendix). Senn and colleagues (2021) categorized the songs into three *style families*: funk, pop, and rock. Our sample of 155 songs included 46 songs belonging to the funk-style family (mostly funk, soul, R&B, rap, and jazz), 42 songs from the pop-style family (mostly pop and disco), and 67 songs from the rock-style family (mostly rock, heavy metal, and rock “n” roll; for the definition of the style families, see Senn et al., 2021).

Text mining

Comments on the YouTube videos were extracted with the *tuber* package (Sood, 2020) for R (R Core Team, 2018). Comments were transformed to lowercase, and direct mentions of artist names and song titles were removed from the comments. All transformations, computations, and analyses were performed on the level of individual comments ($N = 970,220$).

Table 1. Individual Search Terms Used for the Seven Themes.

Theme	Search terms
Groove	groov
Bonding	\\soci, together, mutual, collectiv, mingle, bonding, unite, unity, meet, cooperate, unify
Event	\\event\\, party, concert, club, performance, \\gig\\
Flow/Smoothness	\\flow\\, \\flowing\\, effortless, smooth, fluent
Movement	move, moving, dance, dancing, jump, shake, shaking, bounce, bouncing, \\tap\\
Power	power, \\push\\, pushing, energy, energetic
Timing	\\sync, simultan, align, timing, tight, stable, steady, straight

Note. Note that the search terms represent the stem of the words unless marked with \\. The search term *groov*, for example, includes the words *groove*, *groovy*, and *grooving*. The search term *\\flow* excludes the word *flower*.

Themes. We defined themes of interest that are often mentioned in relationship to groove in previous literature. The individual search terms included in these themes are listed in Table 1:

1. *Groove* terms capture instances where commenters explicitly mention the groove concept or any of its derivatives (e.g., groovy, grooving, grooviest).
2. *Bonding* terms are descriptors that address the strengthening of relationships between humans which has been associated with groove (groove as a “participatory” experience in Keil, 1995; descriptions of “sense of unity” in Kawase & Eguchi, 2010; descriptions of “social connection” in Duman et al., 2021).
3. *Event* terms address music listening as a public happening (such as in a concert or a dance party), in contrast to individual listening. This expands on *bonding* terms without explicitly addressing the affective social aspects.
4. With the *flow/smoothness* terms we intend to capture not only instances of listeners feeling immersed in or absorbed by the music but also comments on smooth and fluent characteristics of the music itself. Immersion has recently been connected with the groove experience (Duman et al., 2021). Similarly, being “part of the music” was a highly endorsed groove-related statement by Janata et al. (2012) and descriptions of the groove feeling by Kawase and Eguchi (2010) included “smooth flow” and “flowing.”
5. *Movement* terms register instances of commenters explicitly referring to body movement. Listeners’ inner urge to move has been understood as a key component of the groove experience (e.g., Janata et al., 2012; Kawase & Eguchi, 2010; Madison, 2006).
6. *Power* terms capture instances where listeners feel that music is powerful or gives listeners an energetic feeling. “Powerful” is one of the descriptors of groove in Kawase and Eguchi (2010) and energetic arousal has recently been linked to the groove experience (Senn et al., 2023).
7. *Timing* terms capture if commenters discuss (micro-)temporal aspects of the music. “The groove depends on the precision of timing” is one of the most endorsed statements in Janata et al. (2012). Among musicians, the timing topic is crucial to groove (Bechtold et al., 2023) and microtiming is an often-discussed factor for the groove experience (e.g., Câmara & Danielsen, 2020; Keil, 1995; Senn et al., 2016).

For each theme, we defined a binary variable that took value 1, if a comment included at least one of the corresponding search terms, and value 0 otherwise. We are aware that many of the

search terms may be semantically ambivalent (the word “move” for example may mean not only body motion but also a change of residence). To avoid any systematic effects of semantic ambivalence on the results, we reviewed a sample of the terms’ appearances in the context of the comments, assessed the risk of semantic ambivalence, and drew conclusions for the interpretation of the results.

Sentiment. We used the *sentiment.ai* R-package (Wiseman et al., 2022) to assess sentiment scores of the individual comments with values closer to -1 representing more negative sentiments and values closer to 1 representing more positive sentiments.

Context. In a more open and data-driven approach, we identified words that directly preceded and directly followed *groove* terms. Stop words and punctuation were excluded from this search with the *tm* R-package (Feinerer & Hornik, 2020). We then subjectively categorized the context of *groove* terms based on words that were used four or more times directly before or directly after *groove* terms. Our three categories were objective context (pattern-, instrument-, and style-related words), subjective context (experience-, movement-, and feeling-related words), and none of the above.

Statistical analyses

The 970,220 individual comments were the statistical units for the analyses of themes, sentiment, and context. We fitted seven logistic regression models to the data to estimate the probability that a comment contains one or more words belonging to the seven themes using the *groove rating* (Senn et al., 2021) and *style family* (funk, pop, rock; Senn et al., 2021) as predictors ($\text{binary theme variable} \sim \text{groove rating} \times \text{style family}$). The models were computed with the *glm* function in R, specifying the response as binary (binomial family) and using the logit link function that is canonical in logistic regression. To estimate the models’ goodness-of-fit and effect sizes, we computed pseudo- R^2 (pR^2) values that estimate the proportion of deviance explained by the model (Heinzl & Mittlböck, 2003). This effect size has the same interpretation as adjusted- R^2 in models with normally distributed errors. For the sentiment analysis, we similarly applied logistic regression models to estimate the relationship between *groove* terms and *sentiment score*, and a linear regression to estimate the relationship between *groove ratings* and *sentiment score*. The interdependence between themes was computed with contingency tables and odds ratios.

As a control analysis, we investigated whether the frequency of *groove* terms was influenced by the type of the videos. Previous research showed that groove ratings of drum rhythms are higher when the audio signal is accompanied by a synchronously moving drummer compared to a static, off-beat, or completely unsynchronized drummer (Eaves et al., 2020). More generally, a meta-analysis of 15 studies showed that music performances are more appreciated when they are accompanied by a visual component (Platz & Kopiez, 2012). Therefore, the goal of this control analysis was to investigate the potential influence of the visual information in the videos on the response variables. Videos were coded by author J.S. as *lyrics* (lyrics displayed during the whole video), *performance* (musicians are seen playing, singing, and dancing), *performance & story* (the video alternates between performance footage and segments that narrate a story), or *picture* (no video, just one or several pictures). Figure S1A in the Supplementary Information shows that *picture* videos included more comments mentioning *groove* terms than *performance & story* or *lyrics* videos. These results suggest that the display of music performances and dances in videos did not lead to an increased

Table 2. Number of Total Comments and Number of Terms in *Groove, Movement, Timing, Power, Flow/Smoothness, Bonding, and Event Themes for Each Style Family.*

Style family	<i>n</i> songs	Total comments	<i>n</i> groove terms	<i>n</i> movement terms	<i>n</i> timing terms	<i>n</i> power terms	<i>n</i> flow terms	<i>n</i> bonding terms	<i>n</i> event terms
Funk	46	65,227	613	1,440	488	516	447	549	488
Pop	42	276,185	612	7,894	739	1,540	303	2,619	739
Rock	67	628,808	417	5,439	1,630	2,956	470	4,652	1,630
Total	155	970,220	1,642	14,773	2,857	5,012	1,220	7,820	7,451

use of *groove* terms. A possible explanation for the increased use of *groove* terms in the *picture* videos is that most of the *picture* videos were from the funk *style family* (Figure S2). When comparing the different video types within each *style family* we found no significant difference in the frequency of *groove* terms (Figure S1B).

Results

Themes

Groove terms were used in 1,642 of the 970,220 comments (Table 2), which means that, on average, one in 591 comments mentions *groove*. The overall success probability that a YouTube commenter uses a *groove* term in response to a song from the surveyed repertoire is $p = .0017$ (95% CI = [.0016, .0018]). A logistic regression model was fitted to the data predicting the probability that a comment contains one or more *groove* terms based on the *groove rating* and *style family* of the song. The interaction effect was not significant ($p = .819$) and thus omitted from the model. The final model ($groove\ terms \sim groove\ rating + style\ family$) showed significant main effects of *groove rating* ($pR^2 = .0061$, $p < .001$) and *style family* ($pR^2 = .0602$, $p < .001$). Predictors were not independent; therefore, a part of the effect was confounded between predictors ($pR^2 = .0081$). The significant main effects indicate that *groove* terms are most likely to be used in comments on high-groove songs from the funk *style family*, compared to low-groove and pop or rock songs (Figure 1(a), Table 3). In all three individual ratings that comprised the groove rating in Senn et al. (2021), that is, "I like to listen to this music," "I would like to dance to this music," and "This music is great for a party," the frequency of *groove* terms was positively associated with higher ratings and with funk songs compared to pop and rock songs (Figure 2, Table S1).

Movement terms were used in 14,773 of the 970,220 comments (Table 2). On average, one in 66 comments mentions a term from the *movement* theme. A logistic regression model to predict the probability that a comment contains one or more *movement* terms revealed significant main effects of *groove rating* ($pR^2 = .0049$, $p < .001$) and *style family* ($pR^2 = .0171$, $p < .001$; confounded effect: $pR^2 = .0121$), indicating that *movement* terms were used more often in comments on songs with higher *groove ratings* and in comments on songs from the funk *style family* (Figure 1(b), Table 3). The interaction between *groove rating* and *style family* was significant ($pR^2 = .0028$, $p < .001$), indicating that in funk songs the frequency of *movement* terms increased more strongly with increasing *groove ratings* than in pop and rock songs.

Timing terms were used in 2,857 of the 970,220 comments, that is, on average in one of 340 comments (Table 2). A logistic regression model predicting the probability of *timing* terms

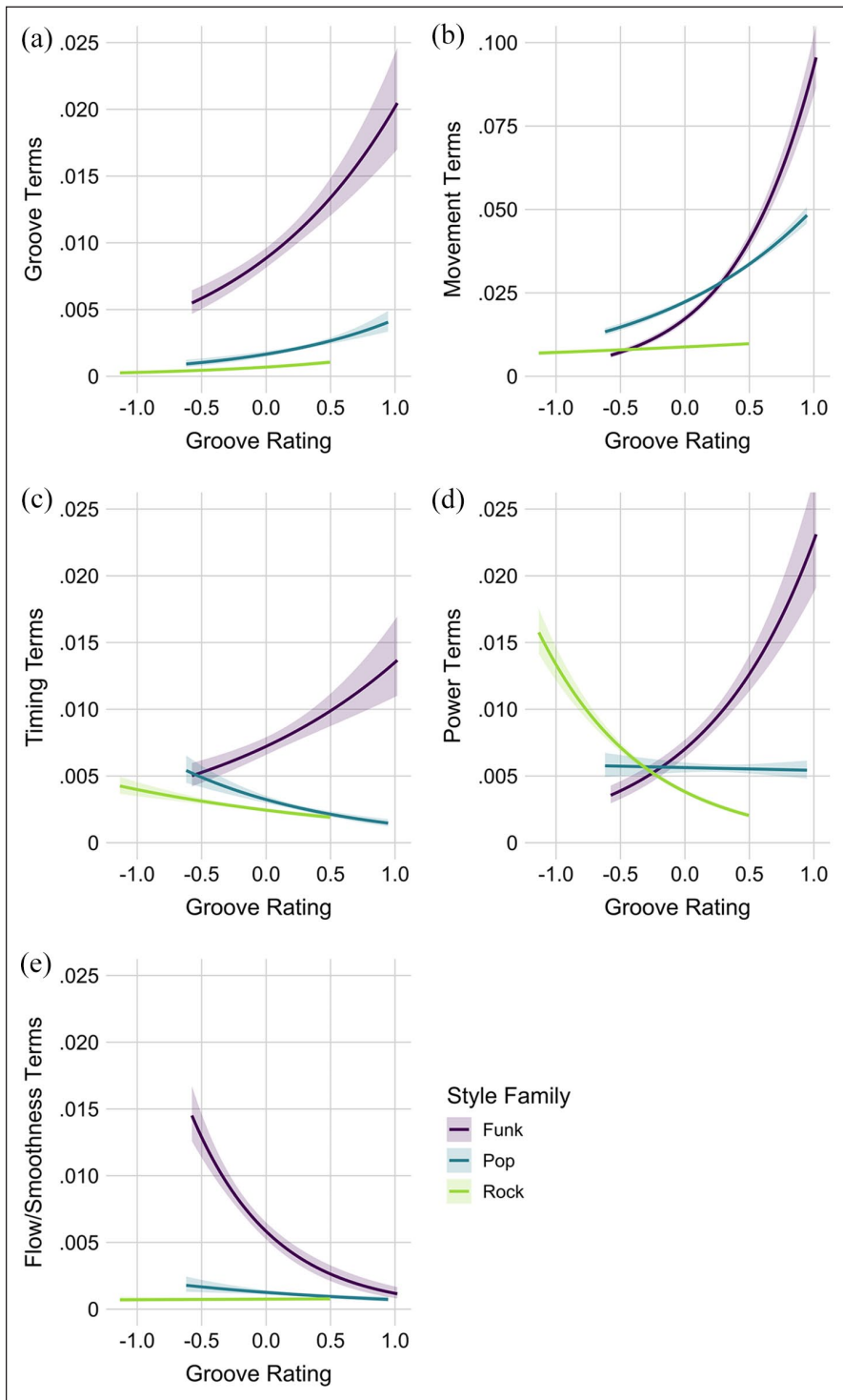


Figure 1. Predictions of the Frequency of (a) Groove, (b) Movement, (c) Timing, (d) Power, and (e) Flow/Smoothness Terms of the Logistic Regression Models With the Independent Variables Groove Rating and Style Family (see Table 3). Shaded Areas Represent 95% Confidence Intervals.

Table 3. Coefficients of Logistic Regression Models With the Dependent Variables *Groove*, *Movement*, *Timing*, *Power* and *Flow/Smoothness* Terms and the Independent Variables *Groove Rating* (Senn et al., 2021) and *Style Family* (Funk, Pop, and Rock).

Model	Coefficient	Estimate	SE	z	p
Groove terms ~ groove rating + style family	Intercept	-7.28	0.05	-148.58	<.001
	Groove rating	0.87	0.07	12.12	<.001
	Style family: pop vs rock	0.91	0.07	13.35	<.001
	Style family: funk vs rock	2.56	0.06	39.69	<.001
Movement terms ~ groove rating × style family	Intercept	-4.72	0.01	-339.59	<.001
	Groove rating	0.21	0.04	5.25	<.001
	Style family: pop vs rock	0.94	0.02	41.61	<.001
	Style family: funk vs rock	0.68	0.04	19.19	<.001
	Groove rating × style family: pop vs rock	0.63	0.06	11.04	<.001
Timing terms ~ groove rating × style family	Intercept	-6.01	0.03	-220.91	<.001
	Groove rating	-0.49	0.07	-6.63	<.001
	Style family: pop vs rock	0.28	0.05	5.63	<.001
	Style family: funk vs rock	1.09	0.05	20.06	<.001
	Groove rating × style family: pop vs rock	-0.34	0.13	-2.57	.010
Power terms ~ groove rating × style family	Intercept	-5.56	0.02	-243.27	<.001
	Groove rating	-1.26	0.06	-21.61	<.001
	Style family: pop vs rock	0.39	0.04	9.50	<.001
	Style family: funk vs rock	0.61	0.05	11.30	<.001
	Groove rating × style family: pop vs rock	1.22	0.10	11.85	<.001
Flow/Smoothness terms ~ groove rating × style family	Intercept	-7.19	0.05	-150.84	<.001
	Groove rating	0.05	0.14	0.39	.692
	Style family: pop vs rock	0.52	0.08	6.16	<.001
	Style family: funk vs rock	2.06	0.07	28.04	<.001
	Groove rating × style family: pop vs rock	-0.62	0.22	-2.77	.006
Groove rating × style family: funk vs rock		-1.65	0.20	-8.25	<.001

Note. The models were computed with the `glm` function in R with binomial family and logit link.

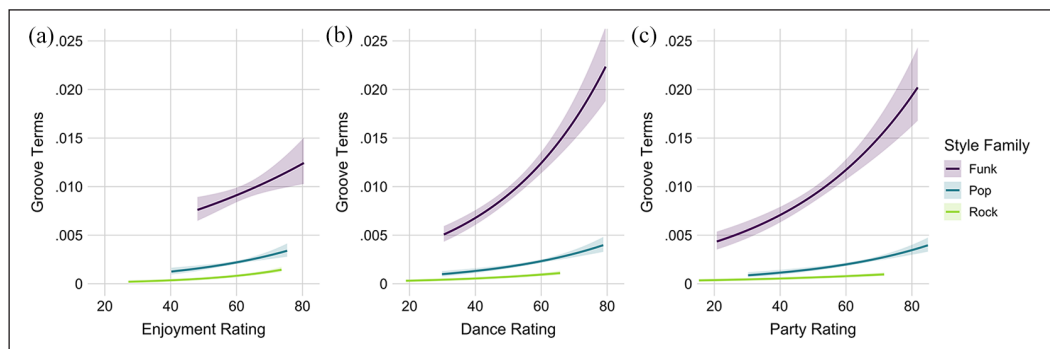


Figure 2. Predictions of the Frequency of Groove Terms of the Logistic Regression Models With the Independent Variables (a) Enjoyment Rating and Style Family, (b) Dance Rating and Style Family, and (c) Party Rating and Style Family (see Table S1). Shaded Areas Represent 95% Confidence Intervals.

revealed the main effects of *groove rating* ($pR^2 = .0008$, $p < .001$) and *style family* ($pR^2 = .0093$, $p < .001$; confounded effect: $pR^2 = .0002$). A significant interaction between *groove rating* and *style family* ($pR^2 = .0025$, $p < .001$) indicates that in funk songs, *timing* terms were mentioned more often in comments on songs with higher *groove ratings*, whereas in pop and rock songs, *timing* terms were mentioned less often in comments on songs with higher *groove ratings* (Figure 1(c), Table 3).

Power terms were used in 5,012 of the 970,220 comments. On average the *power* theme was mentioned in one of 194 comments (Table 2). A logistic regression model predicting the probability of *power* terms revealed the main effects of *groove rating* ($pR^2 = .0028$, $p < .001$) and *style family* ($pR^2 = .0032$, $p < .001$; confounded effect: $pR^2 = .0013$), and a significant interaction ($pR^2 = .0071$, $p < .001$). Whereas the probability that a comment contains a *power* term increased with higher *groove ratings* in funk songs, it decreased with higher *groove ratings* in rock songs (Figure 1(d), Table 3). Figure 3(a) shows that the effect in rock songs was mainly driven by songs from the heavy metal genre, which received low *groove ratings* but had higher frequencies of *power* terms than songs from the other rock genres.

Flow/Smoothness terms were used in 1,220 of the 970,220 comments, that is, on average in one of 795 comments (Table 2). A logistic regression model predicting the probability of *flow/smoothness* terms revealed the main effects of *groove rating* ($pR^2 = .0040$, $p < .001$) and *style family* ($pR^2 = .0523$, $p < .001$; confounded effect: $pR^2 = .0018$). A significant interaction between *style family* and *groove ratings* ($pR^2 = .0038$, $p < .001$) indicates that *flow/smoothness* terms were mentioned more often for songs from the funk *style family* with lower *groove ratings* (Figure 1(e), Table 3). This effect was mainly driven by comments on jazz songs which frequently included the word *smooth* and received low *groove ratings* (Figure 3(b)).

Compared to the models of the aforementioned themes, with overall pR^2 values between .012 and .074, the *event* and *bonding* term models only had overall pR^2 values of .003 and .009, respectively. *Event* and *bonding* term model coefficients are listed in Table S2. Although significant, the small pR^2 values indicate that the effects are very weak, and they will not be discussed further.

Sentiment

We found a highly significant, but weak positive correlation between *groove ratings* and positive sentiment estimates (Estimate = 0.020, $SE = 0.001$, $t = 26.47$, $p < .001$, $R^2 = .001$). In addition, the probability that a comment contains a *groove* term increased with more positive sentiment scores (Estimate = 1.34, $SE = 0.058$, $z = 22.93$, $p < .001$, $pR^2 = .026$).

Context

Movement, *timing*, *power*, *flow/smoothness*, *bonding*, and *event* terms had highly significant tendencies to co-occur with *groove* terms within a comment (Table 4). The highest odds ratios were measured for *flow/smoothness* and *groove* (12.51), *timing* and *groove* (10.35), and *movement* and *groove* (6.12). The co-occurrence of *groove* with terms of the themes *power* (3.11), *event* (3.07), and *bonding* (2.61) had smaller odds ratios and will not be further discussed.

Analyzing words that directly preceded and followed *groove* terms, we found that people used *groove* not only to describe objective instrument-, genre-, sound-, and pattern-related qualities, such as *drum*, *bass*, *funky*, *soul*, *mellow*, *smooth*, and *shuffle*, but also to describe subjective experiences, such as *feel*, *moving*, and *dance* (Table 5).

Comparing the full list of words that directly preceded and followed *groove* terms (Table S3) with the list of descriptions of what makes a song “groove” in Duman et al. (2021) resulted in

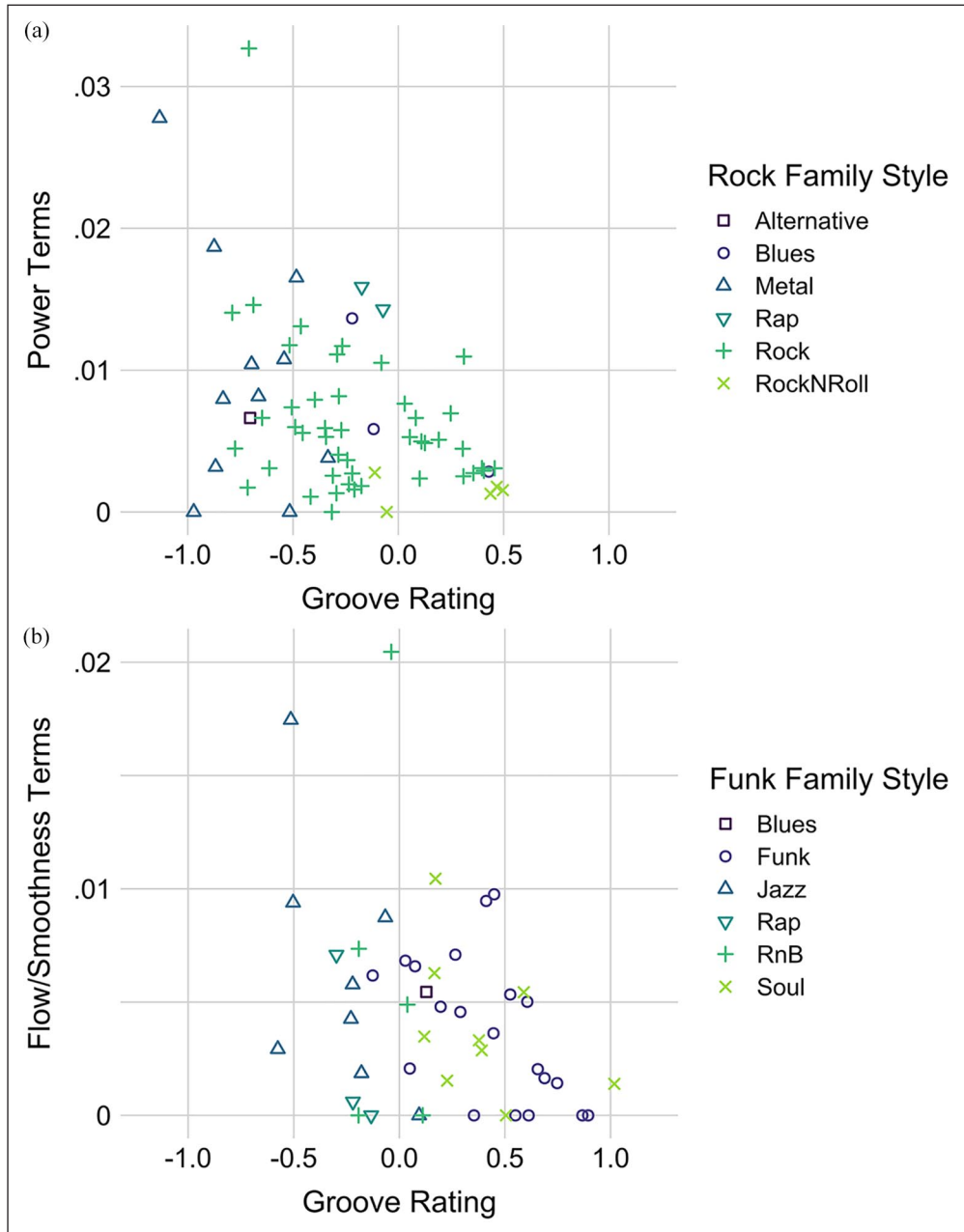


Figure 3. (a) Frequency of Power Terms in Relation to Groove Ratings for the Different Genres in the Rock Style Family. (b) Frequency of Flow/Smoothness Terms in Relation to Groove Ratings for the Different Genres in the Funk Style Family.

the following overlapping terms: *song, drum, like, bass, feel, song, nice, dance, move, good, music, makes, time, beat, guitar, and want*. In a comparison with the themes in Kawase and Eguchi (2010), we found overlaps for the terms *get* (“get into” in Kawase & Eguchi, 2010), *bass, cool, feel, dance, soul, smooth, and move*.

Table 4. Contingency Tables and Odds Ratios Showing the Interdependencies of *Groove* Terms and *Movement, Timing, Power, Flow/Smoothness, Bonding, and Event* Terms in the Comments.

	Groove terms		Odds ratio	<i>p</i>
	1	0		
Movement terms			6.12	<.001
1	141	14,632		
0	1,501	953,946		
Timing terms			10.35	<.001
1	48	2,809		
0	1,594	965,769		
Power terms			3.11	<.001
1	26	4,986		
0	1,616	963,592		
Flow/ Smoothness terms			12.51	<.001
1	25	1,195		
0	1,617	967,383		
Bonding terms			2.61	<.001
1	34	7,786		
0	1,608	960,792		
Event terms			3.07	<.001
1	38	7,413		
0	1,604	961,165		

Discussion

We investigated how the term *groove* is used in everyday language when commenting on music videos on the online platform YouTube. Our two main questions were whether the probability of spontaneously using *groove* terms (such as *groove*, *grooving*, or *groovy*) in a commentary can be predicted from experimentally collected *groove ratings* (Senn et al., 2021), and how this informal use relates to academic definitions of groove. In general, commenters did use *groove* to describe the music in our dataset; however, with an average of one mention in 591 comments, *groove* is used quite rarely. Our results show that *groove* terms were used more often in comments on songs that received higher *groove ratings* in Senn et al. (2021), indicating that the spontaneous use of the term *groove* and explicit ratings of groove—defined as a pleasurable urge to move—are indeed linked. This finding shows that everyday definitions of groove exhibit substantial interindividual consistency, supporting the assumption that “listeners know a good groove when they hear it” (Zbikowski, 2004, p. 272). In line with the definition of groove as a pleasurable urge to move, *groove* terms were used more often in comments that also mentioned *movement* terms and had a more positive sentiment. Importantly, *groove* terms were predominantly used when commenting on songs from the funk *style family*, and to describe musical qualities, suggesting that the use of *groove* in everyday language is related to genre, sound, and performance. In the following, we discuss these findings in the context of both broad perspectives of academic groove definitions: the genre-independent pleasurable urge to move, that is, subjective descriptions of the experience of groove (e.g., Janata et al., 2012; Madison, 2006), and genre-related patterns and performances, that is, objective descriptions of structured sounds in mostly African-American music styles (e.g., Iyer, 2002; Pressing, 2002; Zbikowski, 2004).

Table 5. The Most Frequently Used Words ($n \geq 4$) Relating to Objective Qualities (×) or Subjective Experiences (•) of Groove.

Word preceding groove	<i>n</i>	Word following groove	<i>n</i>
get/gets/getting/got • ×	54	song/songs ×	51
lets •	32	tune/tunes ×	20
drum ×	31	music ×	18
funky/funk/funkiest ×	31	walk • ×	9
feel/feeling • ×	17	bass ×	6
bass ×	16	dance •	6
song ×	13	sound ×	6
moving/move •	13	track ×	6
makes/make • ×	12	band ×	5
keep • ×	11	funky ×	5
dance •	8	rock ×	5
music ×	8	smooth ×	5
mellow ×	6	listen •	4
shuffle ×	6	move •	4
soul ×	6	play • ×	4
smooth ×	5		
pocket ×	4		
tight ×	4		

Note. The words were selected from a list with words that directly preceded and followed *groove* terms after excluding stopwords (see Table S3 for the full list).

Groove as an objective quality

Groove terms were mentioned more often in comments from the funk *style family* (including funk, soul, rap, and other styles of African-American origin), compared to pop and rock-style families. This finding is not surprising given that groove, as a musical concept, emerged within African-American music communities (Pfleiderer, 2006; Pressing, 2002), and is frequently used with respect to jazz (Berliner, 1994, p. 348ff.), soul (Hughes, 2003), funk (Danielsen, 2006), or hip-hop (Katz, 2012). The genre-related use of groove in everyday language is also reflected in the context of *groove* terms, in which *funk* and *soul* were commonly mentioned. Therefore, we can conclude that commenters use the groove concept predominantly in musical contexts in which the concept was originally coined. Academic groove research may have moved on to use groove in a more general sense to denote the movement- and pleasure-inducing qualities of any kind of music, but in everyday parlance, the use of the groove concept remains close to the historic roots of the concept in the popular music genres of the African diaspora (Pressing, 2002).

Other objective contexts of *groove* terms include instruments (*drums*, *bass*), rhythmic patterns (*shuffle*), and aesthetic qualities (*mellow*, *smooth*, *pocket*, *tight*). These contexts coincide with research discussing how a *groove* is indeed commonly shaped by drums and bass (Butterfield, 2010; Keil, 1995; Pressing, 2002), and how tactile information from bass and sub-bass frequencies can promote the experience of groove (Cameron et al., 2022; Hove et al., 2020). Following Câmara and Danielsen (2020), the rhythmic and aesthetic contexts also point out a limitation of approaches that define groove as a basic rhythmic structure: descriptions of the rhythmic pattern itself and the way in which the pattern is played cannot be disentangled. Terms such as *shuffle*, *smooth*, or *pocket* might be used to describe a pattern, a playing style, or a combination of both.

Timing terms, with *straight* and *tight* constituting 66% of the theme's hits, can refer to certain rhythmic patterns or styles of playing. Terms of the *timing* theme were used more frequently in comments that also mentioned *groove*. In accordance with this finding, the context in which *groove* terms occurred commonly included timing- and rhythm-related playing styles, such as *pocket* and *tight*. The connection between timing, rhythm, and groove is often discussed. Groove has been, for example, related to moderate amounts of syncopation (Matthews et al., 2019; Sioros et al., 2014; Stupacher et al., 2022; Witek, 2017; Witek et al., 2014) or to microtiming (Câmara & Danielsen, 2020; Keil, 1995; Senn et al., 2016). Microtiming, understood as intended expressive timing deviations in music performances, has been argued to contribute to a sense of movement and collective participation (Keil, 1995, cf., Butterfield, 2010). Empirical studies on the influence of microtiming deviations on groove ratings, however, are inconsistent (for an overview, see e.g., Senn et al., 2016). These forms of expressive timing and rhythmic structures are common in funk, soul, R&B, jazz, and related genres, which may explain why *timing* terms were only positively associated with *groove ratings* in the *funk style family*. Resonating with this effect of style family, Malone (2022) argues that compared to genres that are commonly associated with a lot of alterations in post-production (e.g., pop and rock), jazz and related genres are more performance-oriented (Kania, 2011) and are expected to be recorded more transparently without fixing intended, nuanced timing deviations.

Groove as a subjective experience

Groove terms were more likely to be used in comments on videos that received higher *groove ratings* in Senn et al. (2021). Given that Senn and colleagues operationalized groove to reflect enjoyment, movement induction, and party suitability (coinciding with definitions of groove as a pleasurable urge to move, e.g., Janata et al., 2012), this finding suggests that *groove* terms were used as descriptors for music that triggers an enjoyable, movement-related, subjective experience. Indeed, comments on songs with higher *groove ratings* showed more positive sentiments and included more *movement* terms. In addition, *groove* terms were mentioned more often in comments on songs with high ratings in all three dimensions that constituted the *groove rating* in Senn et al. (2021): enjoyment, danceability, and party suitability.

Movement terms were mentioned more often in comments on songs with higher *groove ratings*, and more often in comments on funk songs compared to pop and rock songs. However, the effect of *style family* on the probability of *movement* terms was smaller than the effect of *style family* on *groove* terms. The use of *movement* terms might therefore be less genre-dependent than the use of *groove* terms, suggesting that music from different styles may motivate listeners to move. Thus, movement-related aspects of groove may be more genre-independent than objective quality-related aspects of groove. This resonates with the academic definitions of the *experience* of groove as explicitly genre-independent (e.g., Madison, 2006, p. 201; Senn et al., 2021, p. 47; Stupacher et al., 2022, p. 2; cf. Janata et al., 2012).

The tight connection between groove, enjoyment, and movement—as in the definition of groove as a pleasurable urge to move—is also reflected in the relationship between the frequency of *groove* terms and positive sentiments, and the interdependence of *groove* terms and *movement* terms, which shows that if commenters used a *groove* term, they were more likely to use a *movement* term, and vice versa. In addition, *groove* was mentioned in experience- and movement-related contexts, such as *move*, *dance*, and *feel*. However, compared to objective pattern- and performance-related contexts, these subjective contexts were less common. When discussing the context of *groove* terms, one must note that YouTube comments usually discuss and describe the content of the videos; so much so that the semantic content can be reconstructed based on the commentary (see Schultes et al., 2013). In this sense, the commenters in

our dataset may have been more likely to adopt an objective perspective and discuss the music itself, rather than giving their subjective and experiential perspective on the music.

In free-text descriptions of the term *groove*, Duman and colleagues (2021) found that “being in an immersed state with music”—a state that they relate to the concept of flow—plays an important role in groove experiences. Our *flow/smoothness* theme mostly captured not only comments on smoothness ($n=670$) but also flow ($n=282$), fluency ($n=207$), and effortlessness ($n=69$). Whether these comments describe objective qualities of the songs or subjective states is unclear and our findings on the relationship between *groove ratings*, *groove terms*, and *flow/smoothness terms* are inconsistent. On one hand, the strong interdependency of *groove* and *flow/smoothness terms* (odds ratio = 12.51) supports Duman and colleagues’ (2021) assumption that states of immersion are related to the experience of groove. On the other hand, *smoothness* (which contributes the majority of *flow/smoothness term counts*) was mostly used in relation to jazz, referring to a soft, unaggressive type of jazz performance that is even recognized as a sub-genre of jazz (“smooth jazz”; Barber, 2010). Whether commenters referred to *flow* as a musical quality or a subjective state of immersion is therefore unclear.

The relationship between *power terms* and *groove ratings* was strongly affected by *style family*. Higher *groove ratings* were only related to more *power terms* in the funk *style family*. In Duman et al. (2021) one participant states that for a song to be groovy, it “needs to have good energy.” Similarly, some of the commenters in our dataset describe how a song gives them energy. In songs from the funk *style family*, the higher probability of *power terms* with higher *groove ratings* suggests that this energy is related to movement and dance. Other *power terms*, however, are used in a more objective way, describing powerful sounds or performances. In contrast to the funk *style family*, comments on songs from the rock *style family* with higher *groove ratings* were less likely to include *power terms*. This effect was driven by heavy metal songs with higher probabilities of *power terms*, but lower *groove ratings* compared to the other genres from the rock *style family*.

Groove, style, and recording year

In our dataset, older songs were associated with higher *groove ratings* (correlation between recording year and *groove ratings*: $r = -.23$, $p = .004$, 95% CI = $[-.37; -.08]$) and received more mentions of *groove terms* (correlation between recording year and mean *groove term frequency*: $r = -.16$, $p = .047$, 95% CI = $[-.31; -.002]$) than newer songs. However, this effect may be confounded by the *style family* of a song: funk songs were on average recorded earlier than pop songs, and slightly earlier than rock songs (Figure S3). Interestingly, *movement terms* were not significantly correlated with the recording year ($r = -.08$, $p = .329$, 95% CI = $[-.23; .08]$). These findings support the previous conclusion that *groove terms* are more closely related to specific musical styles, such as funk, soul, jazz, and R&B, than *movement terms*.

Conclusion

By employing an exploratory text-mining approach, we investigated how the term *groove* is used in the everyday language of YouTube comments. Although this approach comes with some limitations, such as the ambiguity of certain search terms, off-topic discussions, or a potential oversight of additional groove-relevant themes, it provides new perspectives on the multifaceted and complex concept of groove. Based on 970,220 comments on 155 music videos, our findings suggest that the term *groove* is used to describe movement- and pleasure-related subjective experiences, as well as objective musical qualities that are tightly linked to the genres funk, soul, and R&B. Resonating with previous studies, *groove terms* were very likely to

co-occur with movement (e.g., Janata et al., 2012; Madison, 2006; Stupacher et al., 2013), timing (e.g., Keil, 1995; Senn et al., 2016; Witek et al., 2014), and flow/smoothness (Duman et al., 2021; Stupacher, 2019) themes. Our dataset did not allow for conclusions about the link between groove and social bonding, which has been proposed by previous studies (Dotov et al., 2021; Duman et al., 2021, 2022; Stupacher et al., 2022). In general, the study shows that text-mining approaches to analyzing YouTube comments provide an interesting perspective on how a general population of listeners discusses music. This kind of data can prove to be useful as a reference point for the development of terminology in academia.

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Supplemental material

Supplemental material for this article is available online.

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Appendix

Artist	Song title	Style family	Groove rating ^a	YouTube ID	Number of comments
Aretha Franklin	Rock Steady	Funk	0.39	EXJx2NnnxAO	1,411
B.B. King and Eric Clapton	Riding With The King	Rock	-0.12	IdmvqNxxqvec	176
Bill Withers	Use Me	Funk	0.17	NuYDKzky4zO	780
Billy Cobham	Red Baron	Funk	0.13	N_wQAhBcPEU	369
Billy Cobham	Stratus	Funk	-0.18	b1rX9E8NuRw	543
Black Sabbath	Die Young	Rock	-0.46	R8VFPghP0JU	1,027
Black Sabbath	Evil Woman	Rock	-0.61	IE8IXuSDVNU	328
Black Sabbath	Paranoid	Rock	0.13	OqanF-91aJo	22,857
Black Sabbath	Psycho Man	Rock	-0.87	dakg3h1qoUY	314
Black Sabbath	Sweet Leaf	Rock	-0.33	W-zmtmgswHw	2,136
Blink-182	All The Small Things	Rock	-0.18	9Ht5RZpzPqw	51,866
Blink-182	Down	Rock	-0.65	XrTZT49u0kM	9,696
Blink-182	First Date	Rock	-0.29	vVy9Lgpg1m8	29,874
Blink-182	The Rock Show	Rock	-0.24	z7hhDINyBPO	11,861
Blink-182	What's My Age Again?	Rock	-0.42	K7l5ZeVV0CA	23,526
Booker T. & the M.G.'s	Green Onions	Rock	0.43	_bpS-cOBK6Q	10,611
Charles Wright & The Watts 103rd SRB	Express Yourself	Funk	0.59	rImQZ8euKok	185
Cher	Half-Breed	Pop	-0.59	Z6E98ZRau1s	5,364
Daft Punk feat. Pharrell Williams	Get Lucky	Pop	0.57	CCHdMIEGaaM	13,483
D'Angelo	Chicken Grease	Funk	0.11	bo8DH21BbfY	108
D'Angelo	Devil's Pie	Funk	-0.19	8fNtipp5RLs	1,099
David Bowie	Let's Dance	Pop	0.37	VbD_kBJc_gI	7,560
Deep Purple	Black Night	Rock	-0.21	QuAKMlfxX7I	649
Deep Purple	Highway Star	Rock	-0.27	Wr9ie2J2690	9,168
Deep Purple	Knocking At Your Back Door	Rock	-0.34	G7GERh0sQzY	2,485
Deep Purple	Smoke On The Water	Rock	0.46	zUwElt9ez7M	18,582
Deep Purple	Stormbringer	Rock	-0.08	4C2K889u_90	1,496
Dire Straits	Money For Nothing	Rock	0.31	JRDgihVDEko	11,182
DJ Quik	Black Mercedes	Funk	-0.13	sCnjpw-K_MA	279
Dream Theater	Caught In A Web	Rock	-1.13	8fwf-mZBPWg	144

(Continued)

(Continued)

Artist	Song title	Style family	Groove rating ^a	YouTube ID	Number of comments
Dream Theater	Lie	Rock	-0.66	VD7OdyY1js4	369
Dream Theater	Pull Me Under	Rock	-0.83	SGRgAULYgWE	3,683
Dream Theater	This Dying Soul	Rock	-0.70	WK2R6RNwHDY	387
Earth, Wind & Fire	Fantasy	Pop	0.23	r58GQYFZeLE	5,482
Earth, Wind & Fire	September	Pop	0.95	DlSsIKn3HTU	6,563
Earth, Wind & Fire	Shining Star	Funk	0.75	Zu9a29UR2dU	2,129
Earth, Wind & Fire	Boogie Wonderland	Pop	0.51	god7hAPv8f0	26,337
Ed Sheeran	Bloodstream	Pop	-0.62	XIJHg1XWR7o	5,362
Elvis Presley	(Let Me Be Your) Teddy Bear	Rock	-0.06	NkDbk-egHH4	635
Elvis Presley	Blue Suede Shoes	Rock	-0.11	Bm5HKlQ6nGM	4,074
Elvis Presley	Don't Be Cruel	Rock	0.50	ViMF510wqWA	3,383
Elvis Presley	Hound Dog	Rock	0.47	lzQ8GDBA8Is	6,274
Elvis Presley	Jailhouse Rock	Rock	0.44	PpsUOOfb-vE	4,796
Eric Clapton	My Father's Eyes	Pop	-0.16	VfzYn344gVw	1,221
Foo Fighters	Alone + Easy Target	Rock	-0.78	ZyxjLW2n7W8	449
Foo Fighters	This Is A Call	Rock	-0.40	imxAeQZjBeI	766
Gloria Gaynor	I Will Survive	Pop	0.34	ARt9HV9T0w8	11,385
Herbie Hancock	Actual Proof	Funk	-0.07	m0c38Wtdvz0	574
Herbie Hancock	Hang Up Your Hang Ups	Funk	-0.58	FgBrPQCSdW4	344
Herbie Hancock	Palm Grease	Funk	0.26	AY9rhaYkud0	142
Herbie Hancock	Watermelon Man	Funk	-0.22	4bjPIBC4h_8	2,792
James Brown	Cold Sweat	Funk	0.53	8bztE5IbQOo	1,325
James Brown	Funky Drummer, Pts. 1 & 2	Funk	0.41	AoQ4AtsFWVM	1,293
James Brown	Get On The Good Foot	Funk	0.45	VgGwI12zMJg	1,125
James Brown	Get Up (I Feel Like Being A) Sex Machine	Funk	0.88	huZFThnetjo	386
James Brown	I Got The Feelin'	Funk	0.61	t5CAQU6KsMI	1,431
James Brown	Mother Popcorn	Funk	0.55	zpAPXUMpO_Y	354
James Brown	Soul Power	Funk	1.02	l00JUexdL24	729
Jamiroquai	Feels Just Like It Should	Pop	-0.19	H9W9rc-P9UQ	1,506
Jamiroquai	Little L	Pop	0.45	1hHSH9sJUEo	4,487
Jamiroquai	Space Cowboy	Funk	0.17	OPkjnRIdQXQ	4,094
John Mayer	Crossroads	Rock	-0.32	t-a2I0KrQHLY	89
Judas Priest	Sinner	Rock	-0.52	W50pvi_UHLY	209
Kool & The Gang	Fresh	Pop	0.22	NChc_dH3jA	2,403
Kool & The Gang	Jungle Boogie	Funk	0.45	_cEkamU9xow	210

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Artist	Song title	Style family	Groove rating ^a	YouTube ID	Number of comments
Kool & The Gang	Let's Go Dancin' (Ooh La, La, La)	Pop	0.18	JWuoGZAz94c	1,663
Kool & The Gang	Summer Madness	Funk	-0.51	2SFt7JHwJeg	10,647
Led Zeppelin	Achilles Last Stand	Rock	-0.69	P-Rf1I9htJk	1,588
Led Zeppelin	Kashmir	Rock	-0.27	sR_HWMzgyc	24,392
Led Zeppelin	Misty Mountain Hop	Rock	-0.49	y6M3YQ_EF2E	182
Led Zeppelin	When The Levee Breaks	Rock	-0.22	JM3fodiK9rY	613
Led Zeppelin	Whole Lotta Love	Rock	0.11	HQmmM_qwG4k	22,526
Lionel Richie	All Night Long (All Night)	Pop	0.10	nqAvFx3NxUM	18,391
Loleatta Holloway	Dreamin'	Pop	0.38	OEHEqyyGcrM	265
Maceo Parker	Chicken	Funk	-0.13	7vn0w-zHwFw	326
Megadeth	Die Dead Enough	Rock	-0.97	LILNpbzv2Fw	90
Michael Jackson	Beat It	Pop	0.52	HSNKIdy5HJQ	3,393
Michael Jackson	Billie Jean	Pop	0.78	YrmIOu-kPYc	3,400
Michael Jackson	P.Y.T. (Pretty Young Thing)	Pop	0.59	1ZZQuj6htF4	10,625
Michael Jackson	The Way You Make Me Feel	Pop	0.47	OneY33G1emQ	4,616
Miles Davis	Right Off	Funk	-0.50	VN0rvZwTwRI	214
Neil Diamond	Crunchy Granola Suite	Rock	-0.35	bbANTGyuOp4	339
Nine Inch Nails	Discipline	Rock	-0.70	4R_I2G_mWsc	756
Nirvana	Come As You Are	Rock	0.41	zJjcfAPCxo	1,055
Nirvana	Lithium	Rock	-0.24	pkcJEvMenEg	43,089
Nirvana	Smells Like Teen Spirit	Rock	0.36	zYxkezUr8MQ	42,581
Otis Redding	(Sittin' On) The Dock Of The Bay	Funk	0.12	rTVjnBo96Ug	9,111
Paul Simon	50 Ways To Leave Your Lover—Verse	Pop	-0.09	ABXtWqmArUU	3,070
Prince	Musicology	Funk	0.69	zILabWVdIMs	1,270
Prince	Uptown	Pop	0.16	ZiuSRQHLv88	1,258
Queen	A Kind of Magic	Pop	0.23	Op_1QSUsbsM	9,366
Queen	Another One Bites The Dust	Pop	0.52	cGJ_IyFwieY	4,354
Queen	Bohemian Rhapsody	Rock	0.10	axAtWjn3Mfl	12,838
Queen	Radio Ga-Ga	Pop	0.23	azdwsXLmrHE	38,693
Rage Against The Machine	Bombtrack	Rock	-0.07	MUaL1FnotRQ	1,991
Rage Against The Machine	Bullet In The Head	Funk	-0.22	v5NeyI4-fdI	1,665
Rage Against The Machine	Bulls On Parade	Rock	-0.48	3L4YrGaR8E4	11,603

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Artist	Song title	Style family	Groove rating ^a	YouTube ID	Number of comments
Rage Against The Machine	Killing In The Name Of	Rock	-0.54	bWXazVhlyxQ	44,864
Rage Against The Machine	Renegades of Funk	Rock	-0.17	4KXdu3cZbNQ	582
Red Hot Chili Peppers	By The Way	Rock	-0.31	JnfyjwChuNU	17,925
Red Hot Chili Peppers	Snow (Hey Oh)	Rock	-0.22	yuFI5KSPAt4	30,765
Rufus and Chaka Khan	Ain't Nobody	Pop	0.86	hrWTxRgd4Wk	977
Rufus Thomas	Do The Funky Chicken	Funk	0.87	sFvR0W8TnJM	132
Rush	Bravado	Pop	-0.38	pUSpBAmSMb8	590
Rush	Dreamline	Rock	-0.71	Xtt0MUB93Ms	153
Rush	Far Cry	Rock	-0.87	GWPf0pgjgHI	322
Rush	The Spirit of Radio	Rock	-0.79	g_Qt00RhpOw	4,500
Rush	Tom Sawyer	Rock	-0.52	auLBlk4ibAk	20,101
Simon & Garfunkel	Mrs. Robinson	Pop	0.04	9C1BCAgu2I8	8,695
Slash	By The Sword	Rock	-0.72	qhCnXVVDv1k	584
Sly And The Family Stone	Hot Fun In The Summertime	Funk	0.38	Bg0tFRea0wA	1,220
Sly And The Family Stone	I Want To Take You Higher	Funk	0.23	BqWQzOzK3kw	659
Sly And The Family Stone	Sing A Simple Song	Funk	0.61	51837yh4hec	246
Sly And The Family Stone	You Can Make It If You Try	Funk	0.07	l8sz_7TPWE0	152
Steely Dan	Aja	Pop	-0.58	fG2seugAgnU	1,709
Steely Dan	Home At Last	Funk	-0.04	cGMjGaiIxtY	788
Sting	If I Ever Lose My Faith In You	Pop	-0.02	7km4EHgkQiw	2,042
Sting	Whenever I Say Your Name	Pop	-0.62	roGSyZC79Dg	409
The 5th Dimension	Aquarius/Let The Sunshine In	Pop	-0.26	VlrQ-bOzpkQ	1,147
The Beatles	Let It Be	Pop	-0.18	1LMSOfs10mA	1,696
The Beatles	Ob-La-Di, Ob-La-Da	Pop	0.22	JOc7HcIXoTw	833
The Blues Brothers	Soul Man	Funk	0.51	XM0TUtqddpg	412
The J.B.'s	Pass The Peas	Funk	0.66	mUkfiljooxs	500
The Jimi Hendrix Experience	Hey Joe	Rock	0.19	rXwMrBb2x1Q	4,986
The Jimi Hendrix Experience	Purple Haze	Rock	0.08	WGoDaYjdfSg	4,608
The Jimi Hendrix Experience	Voodoo Child (Slight Return)	Rock	-0.28	IZBlqcbpmxY	7,801

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Artist	Song title	Style family	Groove rating ^a	YouTube ID	Number of comments
The Meters	Cissy Strut	Funk	0.20	MXI5Nuz6OHg	844
The Pointer Sisters	I'm So Excited	Pop	0.37	8iwBM_YB1sE	3,881
The Police	Can't Stand Losing You	Pop	0.42	nH0vjLwMyc4	2,458
The Police	Every Breath You Take	Pop	0.31	_wsMEj2ZfW8	3,780
The Police	Every Little Thing She Does Is Magic	Pop	0.17	aENX1Sf3fgQ	7,702
The Police	Roxanne	Pop	0.15	3T1c7GkzRQQ	19,441
The Rolling Stones	(I Can't Get No) Satisfaction	Rock	0.40	nrIPxIFzDi0	10,616
The Rolling Stones	Get Off of My Cloud	Rock	0.31	QYgJZ79FmBo	837
The Rolling Stones	Honky Tonk Women	Rock	0.05	hqkGxZ1_8I	1,354
The Rolling Stones	Jumpin' Jack Flash	Rock	0.25	G3dFpQzu54w	1,463
The Rolling Stones	Paint It, Black	Rock	0.31	O4irXQhgMqg	61,604
The Roots	You Got Me	Funk	-0.30	MJChEQV454	10,415
The Roots (featuring Dice Raw)	How I Got Over	Funk	0.04	zI4D1QOLGuM	1,443
The Salsoul Orchestra	Tangerine	Pop	-0.07	ih-0Q2sFp8w	324
The Trammps	Disco Inferno	Pop	0.48	u5lSeYd_riw	4,717
The Who	5.15	Rock	-0.28	XC9YY1urT8Q	746
The Who	Going Mobile	Rock	-0.45	ToxymSLzJeM	543
The Who	My Generation	Rock	0.03	qN5zw04WxCc	3,735
The Who	Substitute	Rock	-0.51	eswQl-hcvU0	2,866
The Who	Won't Get Fooled Again	Rock	-0.29	SHhrZgojY1Q	11,118
Tina Turner	Help	Funk	-0.19	4cro7kZKG2c	366
Toto	Africa	Pop	0.48	DWfY9Gre7SI	12,198
Toto	Rosanna	Pop	-0.06	qmOLtTGvsbM	13,339
Tower Of Power	Diggin' On James Brown	Funk	0.35	hfj8zxGos10	193
Tower Of Power	Soul Vaccination	Funk	0.03	46hd6DZS0ww	294
Tower of Power	Squib Cakes	Funk	0.05	pvJH0x1CTho	486
Tower Of Power	What Is Hip	Funk	0.29	oAatPPEaZDA	882
Weather Report	Birdland	Funk	0.09	_Fm10whccto	306
Weather Report	Teen Town	Funk	-0.23	lSUK8bSVHYc	954

^aGroove rating from Senn et al. (2021).