Supplemental material S1:

Classification of stimuli into funk, pop, or rock style families

The classification of the stimuli into the three style families (funk, pop, rock) was carried out empirically on the basis of the survey data: after listening to a stimulus and providing the groove ratings, participants made a guess about the musical style of the stimulus by ticking one or several style boxes. The choice of styles was identical to the list presented in **Figure 1** of the article.

Table S1.1 gives an overview of how frequently the styles were chosen throughout the experiment. It can be observed that some styles were chosen quite often, other styles were chosen more rarely. Note that the frequencies are not natural numbers: when a participant selected more than one style for a stimulus (multiple choice), the vote was split among the selected styles.

Table S1.1 Frequencies of participants' style assignments across the experiment.

Funk Family		Pop Family		Rock Family	
Funk	1188.4	Pop	892.2	Rock	1569.1
Jazz	553.4	Disco	309.1	Rock'n'Roll	324.1
Soul	599.0	Dance	145.9	Heavy Metal	313.7
R&B	399.7			Blues	265.6
Rap	129.2			Alternative	197.8
Total	2869.7		1347.2		2670.3

Some styles listed obtained only a few stray votes: reggae (71.3), country/western (55.9 votes), world music (37.4), latin (14.1 and traditional music (8.2). These votes were omitted in Table 1, and they were not used to create the Style Family variable.

The procedure of assigning a stimulus to a Style Family is best explained using an example: 27 participants rated the eight-bar stimulus extracted from Prince's 2003 track "Musicology," and they offered their opinion to which style this track belonged. The number of votes for each style family represents the 'Observed' counts in **Table S1.2**.

Table S1.2 Calculating the *Style Profile* for Prince's "Musicology" (2003)

Style Family	Funk	Pop	Rock	Total
Observed (O)	24.00	2.50	0.50	27.00
Expected (E)	11.25	5.28	10.47	27.00
Ratio (O/E)	2.13	0.47	0.05	2.65
Style Profile	0.80	0.18	0.02	1.00

Styles from the funk family (Funk, Jazz, Soul, R&B, Rap) obtained 24 votes in the case of "Musicology." Styles from the pop family obtained 2.5 votes (Pop, Disco, Dance), and only 0.5 votes went to the rock family (Rock, Rock'n'Roll, Heavy Metal, Blues, Alternative). One participant split his voice between funk and rock. We could have assigned each stimulus to the style family with the highest number of counts. But since the style families are represented with different frequencies within the sample (see bottom line of **Table S1.1**), we decided to weigh the votes proportionally.

The second row in **Table S1.2** presents the "Expected" counts for each of the three style families. This distributes the 27 votes to the three families according to their proportion of votes across the whole experiment. The third row ("Ratio") presents the ratio between observed and expected frequencies: a ratio > 1 indicates that participants voted for the corresponding style family over-proportionally. In the case of "Musicology," the funk family is the only style family that obtained more votes than expected.

In the last row, the ratios are scaled so that the three values sum up to one. This triple of values represents a stimulus' style profile. Finally, the stimulus is assigned to the style family that obtained a style profile value greater than 0.60. "Musicology" was assigned to the funk family. All stimuli were categorised using the method outlined above. 208 stimuli were assigned to a style family. For the remaining 41 stimuli, none of the style families obtained a style profile value greater than 0.60.

Admittedly, using the 0.60 cut-off criterion was somewhat arbitrary. Yet, it offered a clear path to handle the following quite frequent situation: **Table S1.3** shows the *Style Profile* for Prince's "Kiss" (1985). Participants were divided on the question whether this track was funk or pop. Funk obtained more votes, but pop had a slightly higher value in the style profile, due to the smaller expected value for pop. This in-betweenness of "Kiss" is easy to explain: the syncopated rhythm betrays Prince's funk roots, but the synthesised drums are a clear indicator of 1980s pop.

Table S1.3 Calculating the *Style Profile* for Prince's "Kiss" (1985).

Style Family	Funk	Pop	Rock	Total
Observed (O)	18.73	11.37	1.90	32.00
Expected (E)	13.33	6.26	12.41	32.00
Ratio (O/E)	1.41	1.82	0.15	3.38
Style Profile	0.42	0.54	0.04	1.00

The 0.60 criterion ensured that a stimulus was only then assigned to a style family, if the style association was relatively unambiguous. Of the 208 stimuli that passed the 0.60 criterion, 86 were assigned to the funk family (2,458 observations), 50 to pop (1,432 observations), and 72 to rock (2,030 observations). More examples of style profiles and style family assignments can be studied in **Table 4** of the main article.

Supplemental material: S2 Regression model

Table S2.1 presents the estimated coefficients of the linear model corresponding to the ANOVA table in **Table 1** of the main article. The model predicts *Groove* from *Style Family Preference*, *Style Family*, *Familiarity*, *Expertise*, and *Song-Specific Age* (main effects and two-way interactions).

Effect	Estimate	SE	t	p	
Intercept	− 0.727	0.063	−11.586	< .001	***
Style Family Preference	0.434	0.076	5.686	< .001	***
Style Family (Pop)	0.426	0.085	4.984	< .001	***
Style Family (Funk)	0.411	0.069	5.992	< .001	***
Familiarity (Familiar)	0.871	0.066	13.196	< .001	***
Expertise (Amateur)	0.211	0.071	2.966	.003	**
Expertise (Professional)	0.115	0.070	1.638	.102	
Song-Specific Age (10-25 Years)	−0.012	0.075	−0.161	.872	
Song-Specific Age (> 25 Years)	−0.332	0.078	−4.256	< .001	***
Style Family Preference × Style Family (Pop)	0.104	0.071	1.464	.143	
Style Family Preference × Style Family (Funk)	0.296	0.062	4.786	< .001	***
Style Family Preference × Familiarity (Familiar)	−0.110	0.055	−1.990	.047	*
Style Family Preference × Expertise (Amateur)	−0.055	0.071	−0.780	.435	
Style Family Preference × Expertise (Professional)	0.043	0.074	0.575	.565	
Style Family Preference × Song-Specific Age (10-25)	−0.108	0.063	−1.711	.087	
Style Family Preference × Song-Specific Age (> 25)	−0.039	0.065	−0.600	.549	
Style Family (Pop) × Familiarity (Familiar)	−0.054	0.066	−0.819	.413	
Style Family (Pop) × Expertise (Amateur)	−0.300	0.084	−3.567	< .001	***
Style Family (Pop) × Expertise (Professional)	−0.181	0.084	−2.152	.031	*
Style Family (Pop) × Song-Specific Age (10-25 Years)	0.205	0.074	2.791	.005	**
Style Family (Pop) × Song-Specific Age (> 25 Years)	0.195	0.085	2.282	.023	*
Style Family (Funk) × Familiarity (Familiar)	−0.209	0.058	−3.608	< .001	***
Style Family (Funk) × Expertise (Amateur)	−0.190	0.072	−2.626	.009	**
Style Family (Funk) × Expertise (Professional)	0.023	0.075	0.306	.759	
Style Family (Funk) × Song-Specific Age (10-25)	0.022	0.067	0.327	.774	
Style Family (Funk) × Song-Specific Age (> 25 Years)	0.201	0.070	2.887	.004	**
Familiarity (Familiar) × Expertise (Amateur)	−0.079	0.067	−1.189	.234	
Familiarity (Familiar) × Expertise (Professional)	−0.134	0.066	−2.038	.042	*
Familiarity (Familiar) × Song-Specific Age (10-25)	−0.106	0.057	−1.858	.063	
Familiarity (Familiar) × Song-Specific Age (> 25)	−0.285	0.065	−4.368	< .001	***
Expertise (Amateur) × Song-Specific Age (10-25)	0.121	0.074	1.651	.099	
Expertise (Amateur) × Song-Specific Age (> 25 Years)	0.214	0.078	2.729	.006	**
Expertise (Professional) × Song-Specific Age (10-25)	−0.081	0.073	−1.103	.270	
Expertise (Professional) × Song-Specific Age (> 25)	0.240	0.081	2.970	.003	**

Notes: SE: standard error of the estimate; t: t-statistic; p: significance probability. Significance codes: < .001 = ***; < .01 = **; < .050 = *.