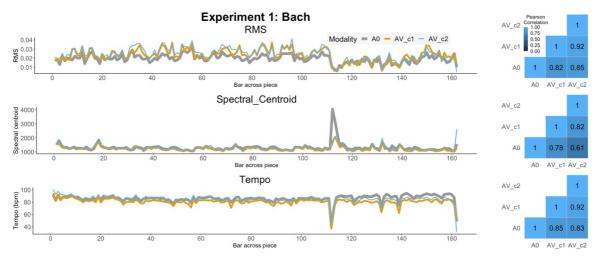
## Supplementary materials

Experime	nt 1			
Feature	Piece	R: C1-C2 ( <i>p</i> )	R: C1-AO ( <i>p</i> )	R: C2-AO ( <i>p</i> )
RMS	Bach	0.9185 ( <i>p</i> < .001)	0.8229 ( <i>p</i> < .001)	0.8539 ( <i>p</i> < .001)
	Beet	0.9777 ( <i>p</i> < .001)	0.9738 ( <i>p</i> < .001)	0.9537 ( <i>p</i> < .001)
	Mess	0.8813 ( <i>p</i> < .001)	0.8028 ( <i>p</i> < .001)	0.8196 ( <i>p</i> < .001)
Spectral	Bach	0.8160 ( <i>p</i> < .001)	0.7845 ( <i>p</i> < .001)	0.6093 ( <i>p</i> < .001)
Centroid	Beet	0.8568 ( <i>p</i> < .001)	0.7033 ( <i>p</i> < .001)	0.7400 ( <i>p</i> < .001)
	Mess	0.8869 ( <i>p</i> < .001)	0.8127 ( <i>p</i> < .001)	0.7751 ( <i>p</i> < .001)
Tempo	Bach	0.9195 ( <i>p</i> < .001)	0.8496 ( <i>p</i> < .001)	0.8316 ( <i>p</i> < .001)
	Beet	0.9328 ( <i>p</i> < .001)	0.9292 ( <i>p</i> < .001)	0.9136 ( <i>p</i> < .001)
	Mess	0.8861 ( <i>p</i> < .001)	0.8883 ( <i>p</i> < .001)	0.9283 ( <i>p</i> < .001)
Experime	nt 2			
Feature	Piece	R: C3-C4 ( <i>p</i> )	R: C3-AO ( <i>p</i> )	R: C4-AO ( <i>p</i> )
RMS	Bach	0.9498 ( <i>p</i> < .001)	0.8976 ( <i>p</i> < .001)	0.8969 ( <i>p</i> < .001)
	Beet	0.9898 ( <i>p</i> < .001)	0.9793( <i>p</i> < .001)	0.9844 ( <i>p</i> < .001)
	Mess	0.9574  (p < .001)	0.9211 ( <i>p</i> < .001)	0.9194 ( <i>p</i> < .001)
Spectral	Bach	0.9539 ( <i>p</i> < .001)	0.6171 ( <i>p</i> < .001)	0.6415 ( <i>p</i> < .001)
Centroid	Beet	0.8931 ( <i>p</i> < .001)	0.8512 ( <i>p</i> < .001)	0.8200 ( <i>p</i> < .001)
	Mess	0.9222 ( <i>p</i> < .001)	0.9038 ( <i>p</i> < .001)	0.8805 ( <i>p</i> < .001)
Tempo	Bach	0.9337 ( <i>p</i> < .001)	0.9495 ( <i>p</i> < .001)	0.9583 ( <i>p</i> < .001)
	Beet	0.9713 ( <i>p</i> < .001)	0.9590 ( <i>p</i> < .001)	0.9706 ( <i>p</i> < .001)
	Mess	0.9815 ( <i>p</i> < .001)	0.9597 ( <i>p</i> < .001)	0.9706 ( <i>p</i> < .001)

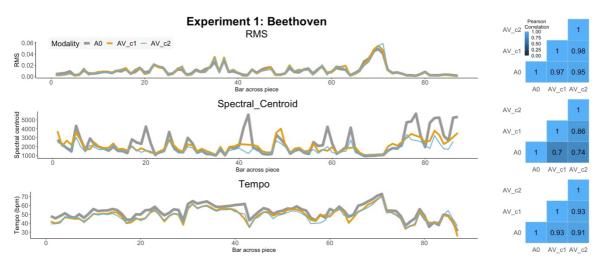
Supplementary Table 1. Correlations of musical features between concerts.

Piece	Section	Bar corresponding to music	Bars corresponding to acoustic and physiological signal (i.e., considering repeats)	Approximate length in time (seconds)
Bach	1	Prelude: 1-16	1-16	44
20011	2	Prelude: Repeat of bars 1-16	17-32	45
	3	Prelude: 17-40	33-56	68
	4	Prelude: 41 - 56	57-72	45
	5	Prelude: Repeat of bars 17-40	73-96	68
	6	Prelude: Repeat of bars 41-56	97-112	51
	7	Fugue: 1-50	113-162	137
Beethoven	1	1-8	1-8	60
	2	9-16	9-16	46
	3	17-25	17-25	64
	4	26-29	26-29	27
	5	30-43	30-43	42
	6	44-55	44-55	42
	7	56-64	56-64	81
	8	65-75	65-63	64
	9	76-87	76-87	68
Messiaen	1	1-32	1-32	60
	2	33-40	33-40	41
	3	41-59	41-59	37
	4	60-131	60-131	142
	5	132-143	132-143	68
	6	144-174	144-174	43
	7	175-184	175-184	55
	8	185-216	185-216	64
	9	217-231	217-231	49

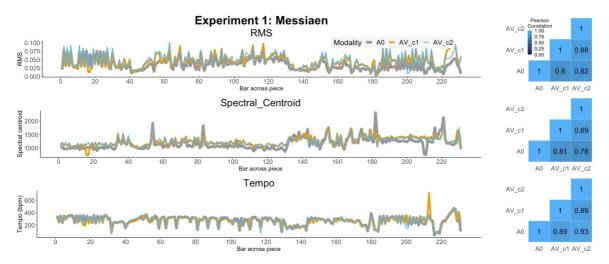
**Supplementary Table 2.** Information and bar numbers of sections that pieces were divided into, driven by the musical structure



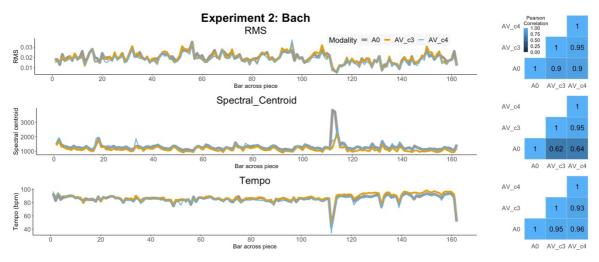
**Supplementary Figure 1.** Experiment 1, Bach piece: time series (left panels) and correlation matrices (right panels) of RMS, spectral centroid, and tempo (different rows) in AO and AV performances from concert 1 and 2.



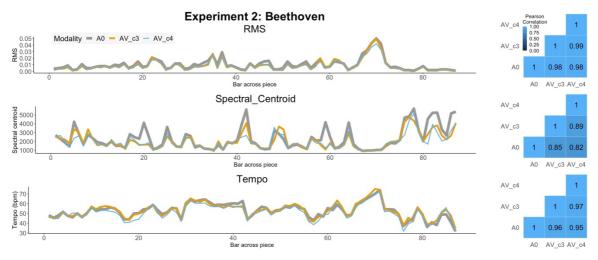
**Supplementary Figure 2.** Experiment 1, Beethoven piece: time series (left panels) and correlation matrices (right panels) of RMS, spectral centroid, and tempo (different rows) in AO and AV performances from concert 1 and 2.



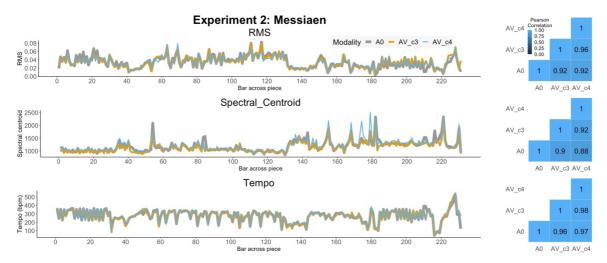
**Supplementary Figure 3.** Experiment 1, Messiaen piece: time series (left panels) and correlation matrices (right panels) of RMS, spectral centroid, and tempo (different rows) in AO and AV performances from concert 1 and 2.



**Supplementary Figure 4.** Experiment 2, Bach piece: time series (left panels) and correlation matrices (right panels) of RMS, spectral centroid, and tempo (different rows) in AO and AV performances from concert 3 and 4.



**Supplementary Figure 5.** Experiment 2, Beethoven piece: time series (left panels) and correlation matrices (right panels) of RMS, spectral centroid, and tempo (different rows) in AO and AV performances from concert 3 and 4.



**Supplementary Figure 6.** Experiment 2, Messiaen piece: time series (left panels) and correlation matrices (right panels) of RMS, spectral centroid, and tempo (different rows) in AO and AV performances from concert 3 and 4.

**Supplementary Table 3.** Linear mixed models for aesthetic experience factor in Experiment 1: maximal and simplified random structure models, until no error is generated.

#### LMM comparison for AE: Experiment 1

· · ·	Maximal m	odel (singulari	ty error)	Constrained cov	ariance parameters (sing	gularity error)	Without s	ope (singulari	ty error)	
Predictors	Estimates	CI	p	Estimates	CI	p	Estimates	CI	р	
(Intercept)	-0.10	-0.69 - 0.49	0.733	-0.10	-0.69 - 0.49	0.733	-0.10	-0.69 - 0.48	0.733	
cond [AV]	0.29	0.05 – 0.52	0.018	0.29	0.05 - 0.52	0.018	0.29	0.05 – 0.52	0.018	
Random Effects										
σ2		0.55			0.55			0.55		
τ <sub>00</sub>	0	0.04 id_n:concert			0.04 id_n:concert		C	.04 id_n:concert		
		0.24 <sub>piece</sub>			0.24 <sub>piece</sub>			0.24 <sub>piece</sub>		
		0.00 concert		0.00 concert				0.00 concert		
τ <sub>11</sub>	0	.00 id_n.condAV			0.00 id_n.condAV					
	0.	00 id_n1.condAO			0.00 id_n1.condAO					
	0.	.00 id_n2.condAV		0.00 id_n2.condAV						
ρ <sub>01</sub>										
ρ <sub>01</sub>										
N		2 concert			2 concert			2 concert		
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
		15 <sub>id_n</sub>			15 <sub>id_n</sub>			15 <sub>id_n</sub>		
Observations		153		153			153			
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.037 / NA		0.037 / NA				0.037 / NA		
AIC		379.967			379.967			373.967		

#### LMM comparison for AE: Experiment 1 (continued)

	Without conc	ert intercept (singul	larity error)	Without slope nor concert intercept (no error)				
Predictors	Estimates	CI	р	Estimates	CI	р		
(Intercept)	-0.10	-0.69 – 0.48	0.733	-0.10	-0.69 - 0.48	0.733		
cond [AV]	0.29	0.05 - 0.52	0.018	0.29	0.05 – 0.52	0.018		
Random Effects								
σ2		0.55 0.55						
τ <sub>00</sub>		0.04 id_n:concert			0.04 id_n:concert			
		0.24 <sub>piece</sub>	0.24 <sub>piece</sub>					
τ <sub>11</sub>		0.00 id_n.condAV						
		0.00 id_n1.condAO						
		0.00 id_n2.condAV						
Ρ01								
ρ <sub>01</sub>								
ICC					0.34			
Ν		3 <sub>piece</sub>		3 <sub>piece</sub>				
		15 <sub>id_n</sub>		15 <sub>id_n</sub>				
		2 concert		2 <sub>concert</sub>				
Observations		153		153				
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.037 / NA			0.024 / 0.355			
AIC		377.967			371.967			

**Supplementary Table 4.** Linear mixed models for aesthetic experience factor in Experiment 2: maximal and simplified random structure models, until no error is generated.

#### LMM comparison for AE: Experiment 2

· · · · · · · · · · · · · · · · · · ·	Maximal m	odel (singulari	ty error)	Constrained cov	ariance parameters (sing	gularity error)	Without s	ope (singulari	ty error	
Predictors	Estimates	CI	p	Estimates	CI	р	Estimates	CI	р	
(Intercept)	0.00	-0.45 - 0.46	0.987	0.00	-0.45 - 0.46	0.987	0.00	-0.45 – 0.46	0.987	
cond [AV]	0.22	0.01 – 0.43	0.040	0.22	0.01 - 0.43	0.040	0.22	0.01 – 0.43	0.040	
Random Effects				•						
σ2		0.40			0.40			0.40		
τ <sub>00</sub>	C	.15 id_n:concert			0.15 id_n:concert		0	.16 id_n:concert		
		0.00 piece		0.00 <sub>piece</sub>			0.00 piece			
		0.08 concert			0.08 concert					
τ <sub>11</sub>	0.	00 id_n1.condAO			0.00 id_n1.condAO					
	0.	00 id_n2.condAV			0.00 id_n2.condAV					
ρ <sub>01</sub>										
ρ <sub>01</sub>										
Ν		2 concert		2 <sub>concert</sub>			2 <sub>concert</sub>			
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
		16 <sub>id_n</sub>			16 <sub>id_n</sub>			16 <sub>id_n</sub>		
Observations		145		145			145			
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.029 / NA			0.029 / NA			0.029 / NA		
AIC		332.563		332.563 326.565						

LMM comparison for AE: Ex			arity error)	Without slope	nor piece interce	ot (no error)		
Predictors	Estimates	ĊI	p	Estimates	CI	p /		
(Intercept)	0.00	-0.45 - 0.46	0.987	0.00	-0.45 - 0.46	0.987		
cond [AV]	0.22	0.01 - 0.43	0.040	0.22	0.01 - 0.43	0.040		
Random Effects			•					
σ <sup>2</sup>		0.40			0.40			
τ <sub>00</sub>		0.16 id_n:concert		0.16 id_n:concert				
		0.08 concert		0.08 concert				
τ <sub>11</sub>								
		0.00 id_n1.condAO						
		0.00 id_n2.condAV						
ρ <sub>01</sub>								
Ρ01								
ICC				0.37				
N		2 concert			2 concert			
		16 <sub>id_n</sub>		16 <sub>id_n</sub>				
Observations		145		145				
Marginal R2 / Conditional R2		0.029 / NA		0.019 / 0.383				
AIC		330.565			324.565			

# **Supplementary Table 5.** Linear mixed models for EMGCS (Corrugator facial muscle activity) in Experiment 2: maximal and simplified random structure models, until no error is generated.

#### LMM comparison for EMGCS: Experiment 2

	Maximal	model (singularit	y error)	Constraine	d covariance paramet	ers (error)	Without slope (error)		
Predictors	Estimates	CI	р	Estimates	CI	р	Estimates	CI	р
(Intercept)	0.0025	0.0020 - 0.0030	<0.001	0.0025	0.0020 - 0.0030	<0.001	0.0025	0.0021 - 0.0029	<0.00
cond [AV]	0.0002	-0.0000 - 0.0004	0.098	0.0002	-0.0000 - 0.0004	0.098	0.0002	0.0001 - 0.0003	<0.00
Random Effects									
σ2		0.00			0.00			0.00	
τ <sub>00</sub>		0.00 section:piece			0.00 section:piece			0.00 section:piece	
		0.00 id_n:concert			0.00 id_n:concert		0.00 id_n:concert		
		0.00 concert			0.00 concert		0.00 concert		
τ <sub>11</sub>		0.00 id_n.condAV			0.00 id_n.condAV				
	0.00 id_n1.condAO			0.00 id_n1.condAO					
		0.00 id_n2.condAV			0.00 id_n2.condAV				
ρ <sub>01</sub>									
ρ <sub>01</sub>									
ICC		0.61		0.61			0.65		
N		2 <sub>concert</sub>		2 concert			2 <sub>concert</sub>		
		9 section			9 section			9 section	
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>	
	15 <sub>id_n</sub>				15 <sub>id_n</sub>	15 <sub>id_n</sub>			
Observations		1037		1037			1037		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.010 / 0.617			0.010 / 0.617			0.007 / 0.657	
AIC		-12173.674			-12173.674			-12108.532	

#### LMM comparison for EMGCS: Experiment 2 (continued)

	Without	concert intercept	(error)	Without slop	e nor concert intercep	t (no error)
Predictors	Estimates	CI	р	Estimates	CI	p
(Intercept)	0.0025	0.0020 - 0.0030	<0.001	0.0025	0.0021 - 0.0029	<0.001
cond [AV]	0.0002	-0.0000 - 0.0004	0.098	0.0002	0.0001 - 0.0003	<0.001

	0.00	0.00		
τ <sub>00</sub>	0.00 section:piece	0.00 section:piece		
	0.00 id_n:concert	0.00 id_n:concert		
τ <sub>11</sub>	0.00 id_n.condAV			
	0.00 id_n1.condAO			
	0.00 id_n2.condAV			
P01				
ρ <sub>01</sub>				
ICC	0.61	0.65		
N	9 section	9 section		
	3 <sub>piece</sub>	3 <sub>piece</sub>		
	15 <sub>id_n</sub>	15 <sub>id_n</sub>		
	2 concert	2 <sub>concert</sub>		
Observations	1037	1037		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.010 / 0.618	0.007 / 0.657		
AIC	-12175.674	-12110.532		

**Supplementary Table 6.** Linear mixed models for EMGZM (Zygomaticus facial muscle activity) in Experiment 2: maximal and simplified random structure models, until no error is generated.

	Maximal	model (singularit	y error)	Constrained covariance parameters (error				
Predictors	Estimates	CI	р	Estimates	CI	p		
(Intercept)	0.0022	0.0019 - 0.0024	<0.001	0.0022	0.0019 - 0.0024	<0.001		
cond [AV]	0.0001	-0.0000 - 0.0002	0.180	0.0001	-0.0000 - 0.0002	0.180		
Random Effects						•		
σ2		0.00			0.00			
τ <sub>00</sub>		0.00 section:piece			0.00 section:piece			
		0.00 id_n:concert			0.00 id_n:concert			
		0.00 concert		0.00 concert				
τ <sub>11</sub>		0.00 id_n.condAV		0.00 id_n.condAV				
		0.00 id_n1.condAO			0.00 id_n1.condAO			
		0.00 id_n2.condAV			0.00 id_n2.condAV			
ρ <sub>01</sub>								
Ρ01								
Ν		2 concert		2 <sub>concert</sub>				
		9 section		9 section				
		3 <sub>piece</sub>		3 <sub>piece</sub>				
		14 <sub>id_n</sub>		14 <sub>id_n</sub>				
Observations		1082		1082				
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.006 / NA		0.006 / NA				
AIC		-12780.993			-12780.993			

I MM comparison	for EMGZM.	Experiment 2

#### LMM comparison for EMGZM: Experiment 2 (continued)

	w	Without slope (error) Without concert intercept (no				
Predictors	Estimates	CI	р	Estimates	CI	р
(Intercept)	0.0022	0.0019 - 0.0024	<0.001	0.0022	0.0019 - 0.0024	<0.001
cond [AV]	0.0001	-0.0000 - 0.0001	0.052	0.0001	-0.0000 - 0.0002	0.180

σ2	0.00	0.00
τ <sub>00</sub>	0.00 section:piece	0.00 section:piece
	0.00 id_n:concert	0.00 id_n:concert
	0.00 concert	
τ <sub>11</sub>		0.00 id_n.condAV
		0.00 id_n1.condAO
		0.00 id_n2.condAV
ρ <sub>01</sub>		
ρ <sub>01</sub>		
ICC	0.50	0.50
N	2 <sub>concert</sub>	9 <sub>section</sub>
	9 section	3 <sub>piece</sub>
	3 <sub>piece</sub>	14 <sub>id_n</sub>
	14 <sub>id_n</sub>	2 <sub>concert</sub>
Observations	1082	1082
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.002 / 0.506	0.003 / 0.502
AIC	-12771.767	-12782.993

Supplementary Table 7. Linear mixed models for High Frequency power in heart rate variability (HF)

in Experiment 2: maximal and simplified random structure models, until no error is generated.

	Maximal	model (singularit	y error)	Constrained covariance parameters (erro						
Predictors	Estimates		p	Estimates	CI	p				
(Intercept)	0.1384	0.1147 – 0.1621	<0.001	0.1384	0.1147 – 0.1621	<0.001				
cond [AV]	0.0044	-0.0069 - 0.0157	0.447	0.0044	-0.0069 - 0.0157	0.447				
Random Effects										
σ2		0.00		0.00						
τ <sub>00</sub>		0.00 section:piece			0.00 section:piece					
		0.00 id_n:concert			0.00 id_n:concert					
		0.00 concert			0.00 concert					
τ <sub>11</sub>		0.00 id_n1.condAO		0.00 id_n1.condAO						
		0.00 id_n2.condAV		0.00 id_n2.condAV						
ρ <sub>01</sub>										
ρ <sub>01</sub>										
ICC		0.47		0.47						
Ν		2 <sub>concert</sub>			2 concert					
		9 section			9 section					
		3 <sub>piece</sub>			3 <sub>piece</sub>					
		15 <sub>id_n</sub>		15 <sub>id_n</sub>						
Observations		1050		1050						
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.001 / 0.467		0.001 / 0.467						
AIC		-2839.267		-2839.267						

LMM comparison for HF: Experiment 2

#### LMM comparison for HF: Experiment 2 (continued)

	W	ithout slope (error	)	Without c	oncert intercept (	no error)
Predictors	Estimates CI		р	Estimates	CI	р
(Intercept)	0.1394 0.1160 - 0.1628		<0.001	0.1384	0.1147 – 0.1621	<0.001
cond [AV]	0.0068	-0.0004 - 0.0139	0.066	0.0044	-0.0069 - 0.0157	0.447

σ <sup>2</sup>	0.00	0.00
τ <sub>00</sub>	0.00 section:piece	0.00 section:piece
	0.00 id_n:concert	0.00 id_n:concert
	0.00 concert	
τ <sub>11</sub>		0.00 id_n1.condAO
		0.00 id_n2.condAV
ρ <sub>01</sub>		
ρ <sub>01</sub>		
ICC		0.47
N	2 <sub>concert</sub>	9 section
	9 section	3 <sub>piece</sub>
	3 <sub>piece</sub>	15 <sub>id_n</sub>
	15 <sub>id_n</sub>	2 concert
Observations	1050	1050
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.003 / NA	0.001 / 0.467
AIC	-2837.652	-2841.267

**Supplementary Table 8.** Linear mixed models for Low Frequency / High Frequency ratio (LF/HF ratio) in heart rate variability in Experiment 2: maximal and simplified random structure models, until no error is generated.

LMM comparison for LFHF r										
		I model (singularity	y error)		d covariance paramet	ers (error)				
Predictors	Estimates	CI	р	Estimates	CI	p	Estimates	CI	p	
(Intercept)	2.1904	1.7790 – 2.6017	<0.001	2.1904	1.7790 – 2.6017	<0.001	2.1926	1.7794 – 2.6059	<0.001	
cond [AV]	-0.2396	-0.43040.0488	0.014	-0.2396	-0.43040.0488	0.014	-0.2604	-0.4116 0.1093	0.001	
Random Effects										
σ2	1.51				1.51		1.52			
τ <sub>00</sub>		0.00 section:piece			0.00 section:piece			0.00 section:piece		
	0.94 id_n:concert			0.94 id_n:concert				0.95 id_n:concert		
	0.00 concert				0.00 concert	0.00 concert				
τ <sub>11</sub>		0.00 id_n1.condAO			0.00 id_n1.condAO					
		0.04 id_n2.condAV			0.04 id_n2.condAV					
Ρ01										
ρ <sub>01</sub>										
ICC		0.39			0.39	0.38				
Ν		2 <sub>concert</sub>			2 concert			2 <sub>concert</sub>		
		9 <sub>section</sub>			9 section			9 section		
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
		15 <sub>id_n</sub>		15 <sub>id_n</sub>			15 <sub>id_n</sub>			
Observations		1041			1041			1041		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.006 / 0.392		0.006 / 0.392			0.007 / 0.389			
AIC		3489.670			3489.670		3485.161			

#### LMM comparison for LFHF ratio: Experiment 2

#### LMM comparison for LFHF ratio: Experiment 2 (continued)

	Without	t concert intercept	(error)	Without slope nor concert intercept (no error				
Predictors	Estimates CI		р	Estimates	CI	p		
(Intercept)	2.1903	1.7792 – 2.6015	<0.001	2.1926	1.7794 – 2.6059	<0.001		
cond [AV]	-0.2396	-0.43040.0488	0.014	-0.2604	-0.4116 – -0.1093	0.001		

σ2	1.51	1.52
τ <sub>00</sub>	0.00 section:piece	0.00 section:piece
	0.94 id_n:concert	0.95 id_n:concert
τ <sub>11</sub>	0.00 id_n1.condAO	
	0.04 id_n2.condAV	
ρ <sub>01</sub>		
ρ <sub>01</sub>		
ICC	0.39	0.38
N	9 <sub>section</sub>	9 section
	3 <sub>piece</sub>	3 <sub>piece</sub>
	15 <sub>id_n</sub>	15 <sub>id_n</sub>
	2 <sub>concert</sub>	2 <sub>concert</sub>
Observations	1041	1041
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.006 / 0.392	0.007 / 0.389
AIC	3487.670	3483.161

**Supplementary Table 9.** Linear mixed models for heart rate (HR) in Experiment 2: maximal and simplified random structure models, until no error is generated.

	M	aximal model (error	)	Constraine	d covariance paramet	Without slope (no error)				
Predictors	Estimates	CI	p	Estimates	CI	p	Estimates	p		
(Intercept)	62.0143	54.3396 - 69.6890	<0.001	62.0143	54.3396 - 69.6890	<0.001	61.9969	54.9576 - 69.0361	<0.001	
cond [AV]	-0.2951	-1.2997 – 0.7094	0.564	-0.2951	-1.2997 – 0.7094	0.564	-0.1932	-0.4390 - 0.0527	0.123	
Random Effects								•		
σ2	3.46				3.46			4.16		
τ <sub>00</sub>		0.13 section:piece			0.13 section:piece			0.11 section:piece		
		65.05 id_n:concert		65.05 id_n:concert			65.70 id_n:concert			
	24.91 concert				24.91 concert	19.99 <sub>concert</sub>				
τ <sub>11</sub>	0.00 <sub>id_n1.condAO</sub>				0.00 id_n1.condAO					
	3.72 id_n2.condAV				3.72 id_n2.condAV					
ρ <sub>01</sub>										
ρ <sub>01</sub>										
ICC								0.95		
Ν		2 concert			2 concert			2 concert		
		9 section			9 section			9 section		
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
		15 <sub>id_n</sub>			15 <sub>id_n</sub>			15 <sub>id_n</sub>		
Observations		1073		1073			1073			
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.006 / NA			0.006 / NA		0.000 / 0.954			
AIC		4613.406			4613.406		4754.982			

LMM comparison for HR: Experiment 2

**Supplementary Table 10.** Linear mixed models for respiration rate (RR) in Experiment 2: maximal and simplified random structure models, until no error is generated.

	Maxima	I model (singularity	error)	Constraine	d covariance paramet	ers (error)	Without slope (no error)			
Predictors	Estimates	CI	p	Estimates	CI	p	Estimates	CI	р	
(Intercept)	18.2917	17.0021 - 19.5814	<0.001	18.2917	17.0021 - 19.5814	<0.001	18.3133	17.1729 – 19.4537	<0.001	
cond [AV]	0.2274	-0.1377 - 0.5925	0.222	0.2274	-0.1377 - 0.5925	0.222	0.2570	0.0873 - 0.4266	0.003	
Random Effects										
σ <sup>2</sup>		2.03			2.03			2.11		
τ <sub>00</sub>	0.31 section:piece				0.31 section:piece			0.30 section:piece		
	4.71 id_n:concert			4.71 id_n:concert			6.71 id_n:concert			
	0.00 concert			0.00 concert			0.08 concert			
τ <sub>11</sub>	3.17 id_n1.condAO			3.17 id_n1.condAO						
		2.04 id_n2.condAV			2.04 id_n2.condAV					
Ρ01										
ρ <sub>01</sub>										
ICC		0.75		0.75			0.77			
Ν		2 concert			2 concert			2 concert		
		9 section			9 section			9 section		
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
		15 <sub>id_n</sub>			15 <sub>id_n</sub>		15 <sub>id_n</sub>			
Observations		1152			1152		1152			
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.002 / 0.749			0.002 / 0.749		0.002 / 0.771			
AIC		4294.608			4294.608		4312.895			

### Supplementary Table 11. Linear mixed models for skin conductance response (SCR) in Experiment

2: maximal and simplified random structure models, until no error is generated.

#### LMM comparison for SCR: Experiment 2

· · · · · · · · · · · · · · · · · · ·	Maximal	model (singularity	error)	Constraine	d covariance paramete	ers (error)				
Predictors	Estimates	CI	p	Estimates	CI	р	Estimates	CI	р	
(Intercept)	-0.0019	-0.0045 - 0.0007	0.156	-0.0019	-0.0045 - 0.0007	0.156	-0.0019	-0.0045 - 0.0007	0.156	
cond [AV]	-0.0002	-0.0016 - 0.0012	0.754	-0.0002	-0.0016 - 0.0012	0.754	-0.0002	-0.0016 - 0.0012	0.754	
Random Effects										
σ2	0.00				0.00			0.00		
τ <sub>00</sub>	0.00 section:piece				0.00 section:piece			0.00 section:piece		
		0.00 id_n:concert			0.00 id_n:concert			0.00 id_n:concert		
	0.00 <sub>concert</sub>			0.00 concert			0.00 concert			
τ <sub>11</sub>	0.00 <sub>id_n.condAV</sub>				0.00 id_n.condAV					
	0.00 id_n1.condAO				0.00 id_n1.condAO					
		0.00 id_n2.condAV			0.00 id_n2.condAV					
ρ <sub>01</sub>										
P01										
Ν		2 <sub>concert</sub>			2 <sub>concert</sub>			2 <sub>concert</sub>		
		9 section			9 section			9 section		
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
	14 <sub>id_n</sub>			14 <sub>id_n</sub>			14 <sub>id_n</sub>			
Observations		855		855			855			
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.000 / NA			0.000 / NA			0.000 / NA		
AIC		-5275.751			-5275.751			-5281.751		

#### LMM comparison for SCR: Experiment 2 (continued)

		concert intercept	(error)		e nor concert intercept	(no error			
Predictors	Estimates	CI	p	Estimates	CI	р			
(Intercept)	-0.0019	-0.0045 - 0.0007	0.156	-0.0019	-0.0045 - 0.0007	0.156			
cond [AV]	-0.0002	-0.0016 - 0.0012	0.754	-0.0002	-0.0016 - 0.0012	0.754			
Random Effects									
σ2		0.00		0.00					
τ <sub>00</sub>		0.00 section:piece		0.00 section:piece					
		0.00 id_n:concert		0.00 id_n:concert					
τ <sub>11</sub>		0.00 id_n.condAV							
		0.00 id_n1.condAO							
		0.00 id_n2.condAV							
ρ <sub>01</sub>									
ρ <sub>01</sub>									
ICC					0.25				
Ν		9 section			9 section				
		3 <sub>piece</sub>			3 <sub>piece</sub>				
		14 <sub>id_n</sub>			14 <sub>id_n</sub>				
		2 concert		2 concert					
Observations		855		855					
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.000 / NA		0.000 / 0.252					
AIC		-5277.751		-5283.751					

Supplementary Table 12. Linear mixed models for skin conductance level (SCL) in Experiment 2:

maximal and simplified random structure models, until no error is generated.

#### LMM comparison for SCL: Experiment 2

·	Maximal	model (singularity	error)	Constrained	d covariance paramete	ers (error)				
Predictors	Estimates	CI	p	Estimates	CI	p	Estimates	ĊI	р	
(Intercept)	0.0005	-0.0247 - 0.0257	0.970	0.0005	-0.0247 - 0.0257	0.970	0.0005	-0.0247 - 0.0257	0.970	
cond [AV]	0.0022	-0.0124 - 0.0168	0.764	0.0022	-0.0124 – 0.0168	0.764	0.0022	-0.0124 - 0.0168	0.764	
Random Effects					-					
σ2	0.01				0.01			0.01		
τ <sub>00</sub>	0.00 section:piece				0.00 section:piece			0.00 section:piece		
		0.00 id_n:concert			0.00 id_n:concert			0.00 id_n:concert		
	0.00 concert				0.00 concert			0.00 concert		
τ <sub>11</sub>	0.00 <sub>id_n.condAV</sub>				0.00 id_n.condAV					
	0.00 id_n1.condAO				0.00 id_n1.condAO					
		0.00 id_n2.condAV			0.00 id_n2.condAV					
ρ <sub>01</sub>										
ρ <sub>01</sub>										
Ν		2 <sub>concert</sub>			2 <sub>concert</sub>			2 <sub>concert</sub>		
		9 section			9 section			9 section		
		3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
		14 <sub>id_n</sub>		14 <sub>id_n</sub>			14 <sub>id_n</sub>			
Observations		910			910			910		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>		0.000 / NA			0.000 / NA			0.000 / NA		
AIC		-1312.587			-1312.587			-1318.587		

#### LMM comparison for SCL: Experiment 2 (continued)

· ·	Without concert intercept (error)			Without slope nor concert intercept (error)			Without slope nor concert and id intercept (no error)		
Predictors	Estimates	CI	p	Estimates	CI	р	Estimates	CI	p
(Intercept)	0.0005	-0.0247 - 0.0257	0.970	0.0005	-0.0247 - 0.0257	0.970	0.0005	-0.0247 - 0.0257	0.970
cond [AV]	0.0022	-0.0124 - 0.0168	0.764	0.0022	-0.0124 - 0.0168	0.764	0.0022	-0.0124 - 0.0168	0.764
Random Effects									
σ2	0.01			0.01			0.01		
τ <sub>00</sub>	0.00 section:piece			0.00 section:piece			0.00 section:piece		
	0.00 id_n:concert			0.00 id_n:concert					
τ <sub>11</sub>	0.00 id_n.condAV								
	0.00 id_n1.condAO								
		0.00 id_n2.condAV							
ρ <sub>01</sub>									
ρ <sub>01</sub>									
ICC								0.21	
N	9 section			9 section			9 section		
	3 <sub>piece</sub>			3 <sub>piece</sub>			3 <sub>piece</sub>		
	14 <sub>id_n</sub>			14 <sub>id_n</sub>					
	2 <sub>concert</sub>			2 <sub>concert</sub>					
Observations	910			910			910		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.000 / NA			0.000 / NA			0.000 / 0.213		
AIC	-1314.587			-1320.587			-1322.587		

#### Questionnaire items (translated from German into English)

- 0.1 Please state your age:
- 0.2 Please state your gender: 1. female; 2. male; 3. other
- 0.3 Please state your highest level of education:
  - 1. Secondary school leaving certificate / Mittlere Reife
  - 2. (Technical) Baccalaureate
  - 3. Vocational training
  - 4. College or university degree
  - 5. not specified

0.4 How many years of instrumental lessons (including singing) have you had in your life? \_\_\_\_\_ years

- 0.5 Do you sing? (yes/no)
- 0.6 Do you play an instrument? (yes/no)
- 0.7 I would describe myself as a musician (1. do not agree to 7. Completely agree).
- 0.8 How many concerts/ live musical events have you attended within the last twelve months?

0.9 What kind of concerts/ live musical events do you attend most often? (rock/pop, classical, club/disco, jazz, contemporary, musical, opera, church, other).

#### 1.1. Please answer the following questions

- 1.1.1 How much did you like the piece? (1-7)
- 1.1.2 How much did you like the interpretation? (1-7)
- 1.1.3 How familiar are you with this style of music that you have just heard? (1-7)
- 1.1.4 Do you know the piece? (yes/no)
- 1.2 To what extent do the following phrases apply to you?
  - 1.2.1 I felt the need to move (1-7)
  - 1.2.2 I tried to understand what was happening in the music (1-7)
  - 1.2.3 I felt a connection to the musicians (1-7)
  - 1.2.4 I was completely immersed in the music (1-7)
  - 1.2.5 I felt connected to the other audience members (listeners) (1-7)
  - 1.2.6 I was simply let the music affect me (passively receiving the music) (1-7)
  - 1.2.7 I felt distracted by the measuring equipment (1-7)
- 1.3 Any other comments?