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Who Composed This Piece? Emotions, Creativity and Perceptions in Human and AI-Generated Music

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Abstract

Artistic experience, in its multiple manifestations, involves a complex interplay of anticipation, perception, emotional resonance, and interpretation, delving into the psychology of the artist. The rise of artificial intelligence (AI) in artistic production challenges conventional notions of creativity and emotional expression, especially in music, a domain marked by enduring debates about authorship and authenticity. Focusing on instrumental music, this study investigates how the attribution of authorship (human vs. AI) and listener expectations (via priming conditions) influence the perception of AI-generated music. More precisely, it examines the extent to which the emotional and musical experiences elicited by AI-generated compositions are equivalent to those elicited by human-generated ones. Participants listened to excerpts composed either by a human or by a state-of-the-art AI model, both based on identical keyword prompts, and evaluated them under one of three priming conditions: attribution to AI, attribution to a human, or unattributed (control). Measures included aesthetic evaluations, felt emotions, perceived emotional intention, and perceived creativity. Additionally, the study considers the emotional states experienced by human composers during the creative process, offering insights into the evolving relationship between technology, creativity, and audience reception in the contemporary musical landscape.

Keywords: Artificial Intelligence, creativity, music, emotions, music composition

Introduction

The rapid advancement of Artificial Intelligence (AI) has prompted a growing interdisciplinary discourse on its societal, cultural, and artistic implications[1]. While creativity is traditionally conceptualized as a dynamic and interactive process through which actors generate novel outcomes across diverse domains and environments, whether individually or in groups [1-7], the contemporary theoretical landscape is increasingly scrutinizing the implication of AI for this field [8-12]. In particular, researchers investigate the ability of AI systems, particularly large-scale generative models, to autonomously produce artifacts that are perceived as aesthetically compelling, emotionally resonant, and creative [13-16]. This technological evolution is not merely reshaping modes of production;

[1] https://ca.rollingstone.com/music/our-ai-generated-blues-song-went-viral-and-sparked-controversy/
https://www.bbc.com/news/articles/cq6v83gq66eo
https://www.bbc.com/news/articles/cx2vz60vjyqo

it may also transform how creativity itself is conceptualized, shifting the focus from originality and utility [17] to intention, empathy, and meaning making.

While generative models display excellent computational flexibility - producing outputs that are diverse, stylistically coherent, and contextually adaptive - the reception of AI-generated content continues to be shaped by a persistent anthropocentric bias [13,18,19]. Recent research has demonstrated that individuals tend to report that these systems lack the emotional depth and expressive nuance traditionally associated with human artistry (e.g., [18]), along with perceived authenticity typically found in human-generated ideas, even though this may also extend to AI-generated content, particularly when it is not explicitly labeled as such [20]. One of these phenomena is known as "AI composer bias" [19] and reflects a broader epistemological tension: the reluctance to attribute *creative and emotional value* to non-human agents. Generally, audiences prefer human-authored content, particularly in specific fields such as music, where subjective experience and perceived authorial presence play a central role in the appraisal and evaluation of artistic quality (see [18,21-23]).

This issue becomes especially salient in the context of music. Among other things, music serves as a powerful channel for emotional expression and empathic connection [24-27], allowing listeners to recognize and experience a wide range of emotional states [28,29]. Human composers are often perceived as infusing their work with affective depth, which listeners interpret and internalize [30,31]. However, the nature and locus of musical emotions remain theoretically debated, with different perspectives attributing them to the composer, the listener, or the relational dynamics between them [32,33]. Within this framework, AI-generated music introduces an additional layer of complexity: although it can emulate emotional structures, such as those captured by valence–arousal models [34], it prompts critical questions about whether listeners perceive these outputs as genuinely expressive or merely mimetic, and how musical intentions may be construed in the absence of a human agent directly associated with the act of composition.

With this in mind, recent studies have begun to explore whether listeners attribute creative and emotional qualities, including the attribution of emotional intention to AI-generated music. For example, empirical research by Fišer et al. (2025) revealed that while AI- and human-generated music elicited comparable levels of emotional valence, AI-generated compositions were perceived as more arousing but less familiar, suggesting a higher cognitive load in processing synthetic outputs [35]. Moreover, although listeners often acknowledge technical quality, they remain less inclined to attribute artistic intention or empathic resonance to non-human composers. A more fine-grained analysis of the discrete emotions experienced and perceived in response to AI- versus human-generated music remains an open area of investigation. Specifically, the distinction between emotions perceived or recognized in a musical excerpt and those genuinely felt by listeners [36-39] warrants further clarification and systematic investigation in the context of AI-generated music.

These discrepancies also invite a deeper examination of the role of empathy in artistic perception. As prior scholarship in aesthetics and neuropsychology has shown, engagement with art is not merely perceptual but involves affective resonance and a search for intentional meaning [40-43]. Central to this process is emotional intelligence, the unique human ability to identify, regulate, and respond to one's own emotions and those of others [44,45]. When confronted with AI-generated content, especially in emotionally loaded media like music, a crucial question arises: can artificial agents, devoid of subjective consciousness, evoke empathic engagement comparable to human creators?

Despite AI's capacity to algorithmically recombine musical materials and generate formally novel outputs, its operations are not underpinned by intrinsically musical intentions or emotional states in the manner characteristic of human composers. This asymmetry has substantive implications for the interpretation and valuation of AI-generated music. In particular, it foregrounds the role of perceived authorship and framing effects (e.g., priming), as well as the enduring cultural and aesthetic significance attributed to human agency in creative practice.

The Present Study

To address these issues, the present study investigates how the attribution of authorship (human vs. AI) and listener expectations (via priming conditions) influence the perception and evaluation of musical excerpts generated by either a human composer or a state-of-the-art AI model, in terms of aesthetic evaluations, felt emotions, perceived emotional intention, and perceived creativity. Participants listened to excerpts generated from identical keyword prompts and evaluated them under one of three priming conditions: attribution to AI, attribution to a human, or no attribution (control). The variables measured in this study were as follows:

- *Aesthetic evaluations*. Participants rated each musical excerpt using a set of bipolar adjective scales (e.g., meaningful–meaningless, beautiful–ugly, sincere–insincere), capturing overall evaluative judgments of the stimulus.
- *Felt emotions*. Participants reported the intensity of emotions they personally experienced while listening to each excerpt, using a predefined list of discrete emotional states.
- *Perceived emotional intentions*. Participants indicated which emotions they believed were intended to be conveyed in each excerpt, based on the same list of emotional states.
- *Perceived creativity*. Participants evaluated each excerpt in terms of novelty, compositional complexity, and overall creativity.

This methodology allows us to disentangle the impact of technological origin from that of perceived authorship, offering novel insights into the evolving role of human bias, empathy, and emotional intelligence in the perception of machine-generated creative works.

Methods

We manipulated the identity of the composer. Specifically, participants were presented with musical excerpts created either by human composers or by an artificial intelligence (AI) system. Each piece was preceded by information regarding its provenance (human, AI, or non-specific), which was accurate only half of the time. The principal objective of this study was to explore the emotional impact and the attribution of emotional intentionality perceived by listeners when exposed to music generated by AI as compared to human composers. More precisely, the study sought to investigate the extent to which the emotional and musical experiences elicited by AI-generated compositions were equivalent to those elicited by human-generated ones. The primary aim of this study was to assess whether listeners reported experiencing specific emotions and attributed emotional intentionality to AI-generated music in ways comparable to human-composed music. Specifically, the study evaluated the extent to which emotional responses were modulated by prior information concerning the stated provenance of the musical excerpts, and whether the attribution of intentionality to the composer occurred consistently, irrespective of the

accuracy of such information. The study implemented a within-subjects, repeated-measures 3×2 factorial design with factors *Prime* (human, AI, non-specified) and *Provenance* (human, AI), see Table 1. Musical excerpts were highly similar across provenances, and each excerpt was preceded by a provenance label corresponding to the prime; this information was accurate on 50% of cases, enabling the dissociation of framing effects from those attributable to the excerpts' actual source. All participants received an invitation letter providing full information about the study aims, procedure, and data handling. Participation was voluntary and required written informed consent, in accordance with the Declaration of Helsinki. All experimental protocol was reviewed and approved by The Way APS Ethical Review Board (Milan, Italy). Signed consent was obtained from all participants before data collection. The human composer also provided informed consent for the use of the musical excerpts and related compositional information in the study.

Participants

The sample comprised 44 healthy adults (28 females, 15 males, 1 non-binary; M = 28.1, SD = 10.20; age range = 19-64 years). Participants were recruited via convenience sampling. Eligibility required being ≥18 years of age; no additional inclusion criteria were applied. Participation did not require any level of education, shared interests, or musical expertise. A-priori power analysis conducted with *G**Power (v3.1.9.7) for repeated-measures ANOVA (within factors), targeting an effect size ($f = 0.25$) with $\alpha = .01$ and $1 - \beta = .95$, indicated a minimum total sample of $N = 36$. We therefore recruited $N = 44$ to ensure adequate power and accommodate potential exclusions. This sample size also aligns with the final sample reported by Pelowski et al. (2022), addressing similar research questions using visual stimuli. Regarding formal musical background, 30 participants (69.8%) reported 1-3 years of formal training, a duration largely consistent with basic musical education integrated into compulsory school, whereas 14 participants (31.8%) reported four or more years of training. Regarding familiarity with AI-generated music, 11 participants indicated that *"I have never heard of it"*, 23 indicated *"I have heard of it but know little about it"*, and, finally, 10 reported *"I have heard/read about it and/or listened to it before"*. When asked whether AI can create music, 42 participants answered yes (95.5%) and 2 answered no (4.5%). Musical preferences were assessed with the STOMP inventory) [46,47]. Specifically, the sample reported listening predominantly to mainstream styles ($M = 5.47$, $SD = 1.18$), as pop music, followed by unconventional ($M = 3.98$, $SD = 1.15$), as alternative or new age music, sophisticated ($M = 3.80$, $SD = 1.28$), such as blues, funk, or soul/R&B, intense music ($M = 3.48$, $SD = 1.64$), as rock, heavy metal or punk music and, finally, contemplative ($M = 2.71$, $SD = 1.15$), as classical music or opera.

Procedure

This study follows a within-subjects repeated-measures experimental design with a 3x2 (Prime x Provenance) matrix in which the stimuli, whether generated by AI or human agent, will be highly similar. The independent variable in the design is (i) prime; (ii) provenance (knowledge of the agent). Specifically, *prime* denoted the provenance label shown before playback, whereas *provenance* denoted the excerpt's actual source. This yielded six within-participant conditions (Human/AI/non-specified prime × Human/AI provenance; see Table 1). Three equivalent musical excerpts for each possible condition were generated and randomly administered to participants.

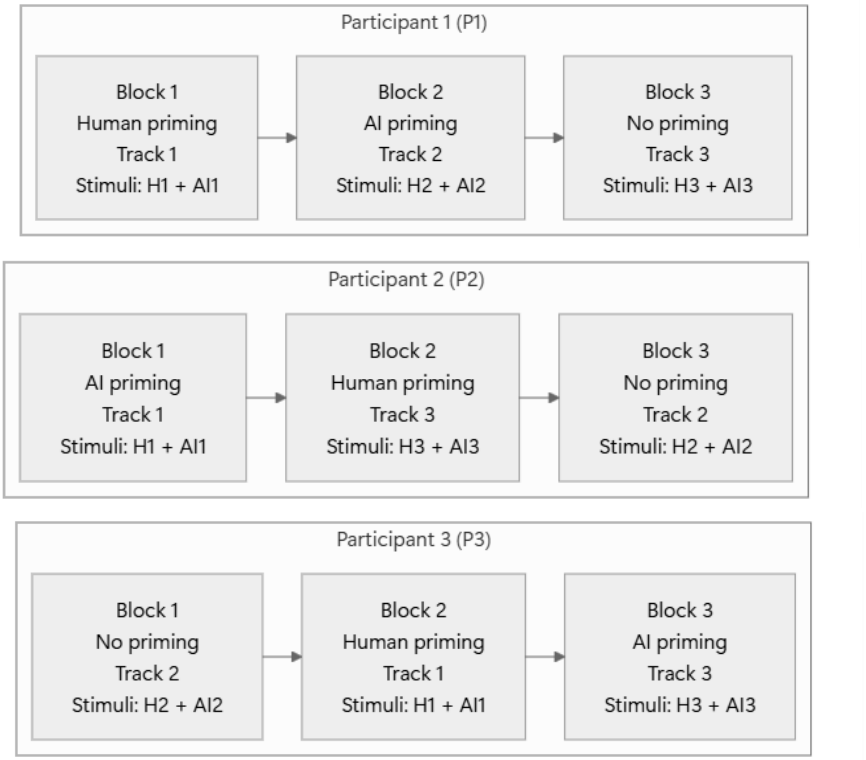
Table 1. Within-Subjects experimental design matrix. The six resulting experimental conditions derived from the factorial combination of the independent variables: Prime (the label shown to the participant: Human, AI, or non-specified) and Provenance (the actual source of the music: Human or AI).

	Provenance: Human	**Provenance: AI**

	(Actual Source)	(Actual Source)
Human (Priming)	Human x Human	Human x AI
IA (Priming)	AI x Human	IA x IA
Non-specified (Priming)	NS x Human	Ns x IA

The provenance label was accurate on 50% of trials, enabling the effect of informational framing to be separated from the effect of the actual source. To expose every participant to all Prime × Provenance combinations while controlling order and item effects, we used a blocked structure with three blocks corresponding to the three Prime levels (Block 1: human; Block 2: AI; Block 3: non-specified). Each block contained two excerpts (one human-provenance and one AI-provenance) presented in randomized order. Across participants, assignment of excerpt identity (three human and three AI items) to blocks and positions was counterbalanced, such that each excerpt appeared equally often (i) in each block, (ii) in each serial position within the block, and (iii) under true vs. misattributed labels. At the participant level, label accuracy was balanced (3 true, 3 misattributed). An illustrative schedule is reported in Table 2.

Table 2. Example block schedule of participants 1, 2 and 3 (randomized primes; counterbalanced excerpt identities and order).



Participants completed the study online via the Qualtrics platform. They were instructed to listen to the musical excerpts using their mobile phone in a quiet, non-noisy environment and to minimize potential distractions during the task. Participants listened to six instrumental excerpts (three human-composed, three AI-generated), each not exceeding 60 s. Before exposure, participants completed informed consent, demographics, and rated the intensity they lived a series of discrete emotions of a 7-point Likert scale. Excerpts were presented in three blocks corresponding to the prime levels; each block contained two excerpts (one human, one AI) in randomized order,

with counterbalancing of both excerpt order and prime assignment across participants. No time limit was imposed for listening or responding and participants were permitted to replay the excerpt multiple times before submitting their ratings. After each excerpt, participants provided ratings of pleasantness, discrete emotions both perceived and felt, general affect, perceived creativity. The entire session lasted approximately 40 minutes.

Stimuli

The stimulus set comprised six instrumental excerpts (three human-composed; three AI-generated), each with a duration of 30–60 s and crafted to be highly similar in sonic characteristics and intended affect. A single human composer produced all three human-provenance excerpts. Prior to composition, the composer identified one or more target emotions to be conveyed to listeners from a 24-item list derived from Pelowski et al. (2022) and Demmer et al. (2023), which covers a broadly representative range of art-related responses; target emotions were explicitly marked (by circling or placing an asterisk). Following composition, the composer rated the extent to which each of the 24 emotions had been experienced during creation on a 7-point Likert scale (1 = not at all; 7 = extremely). The human-composed excerpts featured consistent instrumentation across all three tracks (bass, electric guitar, and synthesized drums), differentiating primarily by genre, tempo, and intended emotional profile. Specifically, the first piece (post-rock, 103 bpm) was designed to convey a need to leave/escape, sadness, and confusion; the second (funky, 115 bpm) focused on eliciting amusement, freedom, self-awareness, and stimulation; and the third (hard rock, 93 bpm) target feelings of anger, focus, self-awareness, disappointment, awareness of one's actions/body, and stimulation. The three AI-provenance excerpts were subsequently generated with Splash Pro - AI music generator (splashmusic.com) using textual prompts that precisely mirrored the specifications of the human-composed pieces by detailing instrumentation, tempo, and target emotional content, thereby ensuring close alignment between human and AI stimuli in genre, acoustic features, and intended affective experience.

Table 3. Textual Prompts Used for AI Music Generation

Excerpts	Characteristic
Excerpt 1 (Based on Human Post-Rock Track)	An instrumental with only bass, guitar and drums. Do not add distortion or other instruments. Lead guitar notes should be linked together with slow dynamics. The song must have the guitar as the main instrument. The drums and bass should only accompany the guitar. The song must evoke moments of needing to leave, sadness and confusion. We are aiming for a post-rock genre.
Excerpt 2 (Based on Human Funk Track)	An instrumental with only bass, one guitar and drum. Do not add distortions or other instruments. The song must invoke moments of fun, freedom, self-awareness. Also, it must be inspiring. Finally, it must be inspired. We aim for a funk genre.
Excerpt 3 (Based on Human Hard Rock Track)	An instrumental with only bass, one guitar and drum. Do not add distortions or other instruments. The song must invoke moments of anger, focus, disappointment, self-awareness, and awareness of actions/body. Also, it must be inspiring and inspired by the hard rock music genre.

Audio Feature Extraction and Similarity Analysis

To evaluate the structural similarity between the AI-generated and human-composed music pairs, which were created based on identical compositional instructions, a computational analysis was performed using the Python programming language and the Librosa Library. Following the framework proposed by Casey and colleagues (2008), two primary descriptors were examined: Melodic Similarity and Timbral Similarity. Melodic similarity was assessed through Chroma features (Pitch Class Profiles), which map the sound spectrum onto the twelve semitones

of the musical scale. By folding all octaves into a single vector, this index effectively isolates harmonic and melodic content while remaining invariant to pitch height. Timbral similarity was measured using Mel-Frequency Cepstral Coefficients (MFCCs), the gold standard in Music Information Retrieval (MIR) for describing the ‘‘color’’ and texture of sound. MFCCs capture the sonic identity of the instrumentation by approximating the human auditory system’s non-linear perception of frequencies via the Mel scale. The reliability and robustness of MFCC extraction from MP3-encoded audio is further supported by Sigurdsson et al. (2006). The quantitative comparison between these feature vectors was conducted using Cosine Similarity, a metric widely recognized in modern recommendation systems for its ability to assess similarity between audio descriptors independently of their vector magnitude (Alyza et al., 2023).

Table 4. Textual Prompts Used for AI Music Generation

Excerpt	**Melodic Similarity**	**Timbral Similarity**
Excerpt One	91.29 %	96.88 %
Excerpt Two	94.11 %	97.12 %
Excerpt Three	95.55 %	95.36 %

Measures

Participants first gave written informed consent and provided demographics information by means of an online survey on Qualtrics platform. First, participants reported age, gender, place of birth/residence, and education. Additional items assessed musical expertise, familiarity with AI-generated music, the belief that AI can create music (yes/no), and musical preferences [46,47]. Before the experimental session and after each excerpt, consistent with a dimensional model of affect (e.g., Russell, 1980 [48]), three single-item ratings captured positive affect, negative affect, and activation/arousal following each excerpt (1 = not at all; 7 = extremely).

After each excerpt, participants evaluated the musical stimulus using 14 bipolar adjective pairs on 7-point scales (e.g., 1 = very beautiful, 4 = neither, 7 = very ugly), adapted from Pelowski (2015; 2020). Participants indicated the emotions felt while listening using a 24-item list derived from Pelowski et al. (2022), which represents a broadly inclusive range of art-related responses *("Please try to think about how you felt while listening to the song: How did the track make you feel?”).* The list was extended with musical emotions (e.g., boredom, nostalgia, tenderness, curiosity, longing; [37,49]) and with awe [50]. A “no emotion perceived” option was available. Items were rated on 7-point scales (1 = not at all; 7 = extremely). Using the same list of emotions, participants rated (1–7) which emotions they believed were specifically intended for them by the composer of the excerpt (multiple selections permitted), with a “no intended emotions” option. Finally, participants rated the excerpt’s originality (general novelty/creative use of sounds relative to typical listening), compositional complexity (perceived internal complexity), and overall creativity, each on 7-point scales (1 = low; 7 = high).

Results

All analyses were conducted in Jamovi (version 2.6.11).

Artwork ratings

To investigate the effects of Prime (human, AI, non-specific) and Provenance (human, AI) on aesthetic evaluations, we conducted a within-subjects 3 × 2 repeated-measures ANOVA. A significant main effect of Provenance emerged across several evaluative dimensions, indicating systematic differences in how human- and AI-generated excerpts were perceived. Specifically, human-provenance excerpts were rated as more meaningful, good, beautiful, sincere, intimate, and serious than AI-provenance excerpts. For example, significant effects of Provenance were observed for meaningless–meaningful [F (1, 43) = 11.60, p = .001, η^2p = .213] and bad–good [F (1, 43) = 16.00, p = .005, η^2p = .168]. Similar effects were found for ugly–beautiful, insincere–sincere, distant–intimate, and serious (all $p \leq$ .017; see Table 5 for full results). A marginal effect was observed for unpleasant–pleasant [F (1, 43) = 4.01, p = .052, η^2p = .085]. Overall, AI-provenance excerpts tended to receive less positive and less emotionally engaging evaluations compared to human-provenance excerpts (see Figure 1).

Table 5. F-statistics, significance levels (p), and effect sizes (η^2p) of aesthetic evaluation dimensions across provenance conditions.

Dimension	***F* (1, 43)**	***p***	**η^2p**
Ugly–beautiful	6.187	.017	.126
Boring-interesting	6.87	.012	.138
Insincere-sincere	7.68	.008	.152
Distant-intimate	32.77	<. 001	.432
Humorous–serious	14.851	< .001	.257

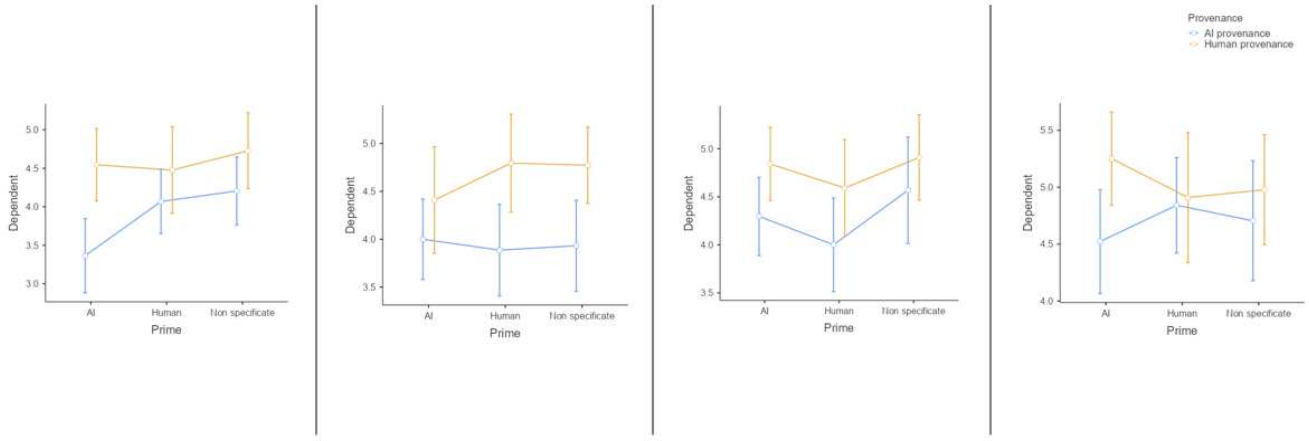


Figure 1. Interaction effects of *Prime* and *Provenance* on ratings of (a) meaningless–meaningful, (b) unpleasant–pleasant, (c) bad–good, and (d) humorous–serious.

***Provenance* × *Prime* interaction**. Significant Prime × Provenance interactions emerged for several evaluative dimensions, including ugly–beautiful, passive–active, impotent–potent, weak–strong, and boring–interesting (all ps ≤ .013; see Table 6 for full statistics).

Table 6. Values represent F, p, and η^2p on aesthetic evaluation dimensions showing significant Prime × Provenance interactions.

Dimension	F (1, 43)	*p*	η^2p
ugly–beautiful	4.766	.017	.126
passive-active	5.684	.007	.117
impotent-potent	10.34	.009	.107
weak-strong	7.09	.002	.141
boring-interesting	5.60	.006	.115

In other words, AI-generated excerpts were rated as more interesting, t (43) = −3.28, p = .031, and stronger, t (43) = −4.28, p = .002, when no priming information was provided in the AI-provenance condition (see Figure 2). Conversely, human-generated excerpts were rated as more beautiful, t (43) = −4.61, p < .001, and more impactful, t (43) = −3.57, p = .013, when they were presented with AI priming (see Figure 3). These interactions indicate that the effect of provenance depended on how the excerpt was labelled before listening. Overall, aesthetic evaluations were not solely driven by the actual source of the music but were significantly shaped by expectations induced through labeling. In particular, the absence of authorship information appeared to enhance the evaluation of AI-generated music, whereas AI priming enhanced the perceived impact of human-generated excerpts. See table 7 for estimated marginal means.

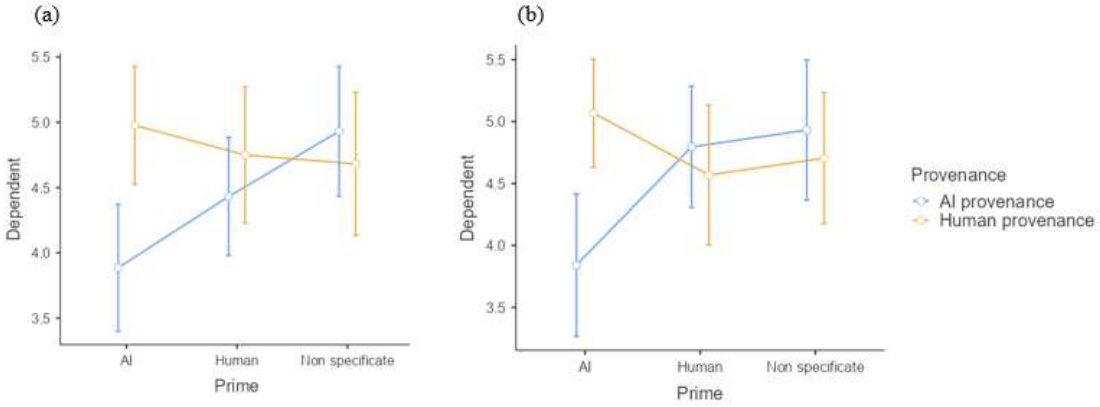


Figure 2. Interaction effects of *Prime* and *Provenance* on ratings of (a) boring–interesting and (b) weak–strong.

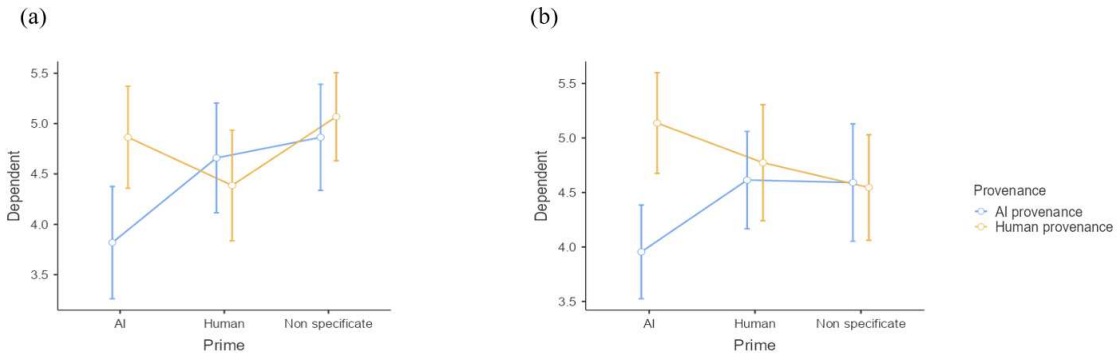


Figure 3. Interaction effects of *Prime* and *Provenance* on ratings of (a) impotent–potent and (b) ugly–beautiful.

Table 7. Estimated marginal means for significant interaction effects.

Ugly-beautiful				*Impotent-potent*			
Provenance	**Prime**	**M**	**SE**	**Provenance**	**Prime**	**M**	**SE**
AI	AI	3.95	0.21	AI	AI	3.82	0.28
	Human	**4.61**	0.22		Human	4.66	0.27
	NS	4.59	0.27		NS	**4.86**	0.26
Human	AI	**5.14**	0.23	Human	AI	4.86	0.25
	Human	4.77	0.26		Human	4.39	0.27
	NS	4.55	0.24		NS	**5.07**	0.22
Passive-active				*Weak-strong*			
Provenance	**Prime**	**M**	**SE**	**Provenance**	**Prime**	**M**	**SE**
AI	AI	4.27	0.27	AI	AI	3.84	0.28
	Human	4.98	0.24		Human	4.80	0.24
	NS	**5.05**	0.29		NS	**4.93**	0.28
Human	AI	**4.86**	0.24	Human	AI	**5.07**	0.22
	Human	4.43	0.28		Human	4.57	0.28
	NS	4.30	0.29		NS	4.70	0.26

Boring-Interesting			
Provenance	**Prime**	**M**	**SE**
AI	AI	3.89	0.24
	Human	4.43	0.22
	NS	**4.93**	0.25
Human	AI	**4.98**	0.22
	Human	4.75	0.26
	NS	4.68	0.27

**Note:* NS = non-specific

Felt emotions

A series of main effects of *Provenance* emerged for several felt emotions, indicating differences in the emotional responses elicited by human- and AI-generated excerpts. Specifically, human-provenance excerpts elicited higher levels of complex and aesthetically emotional experiences. These effects included sadness, awe, nostalgia, tenderness, chills, sublime and feeling moved, as well as more introspective states such as feeling focused. For example, sadness was significantly higher for human compared to AI excerpts, F (1, 43) = 16.00, p = .005, η^2p = .168, nostalgia, F (1,43) = 127.875, p < .001 η^2p = .229, tenderness F (1, 43) = 224.391, p = < .001, η^2p = .338, and

awe, F (1, 43) = 20.19, p = .002, η^2p = .197. In contrast, AI-provenance excerpts were associated with higher levels of more disengaging or distancing responses, such as the need to stop/leave, F (1, 43) = 4.62, p = .037, η^2p = .097, and feeling distracted, F (1, 43) = 6.82, p = .012, η^2p = .137. Overall, these findings suggest that while both human- and AI-generated music can elicit emotional responses, human-provenance excerpts are more likely to evoke deeper, more self-referential and aesthetically engaging emotions, whereas AI-generated excerpts tend to elicit more superficial or disengaging affective states (see Table 7 for full results). See Table 8 estimated marginal means.

Table 7. Values represent *F, p*, and η^2p on felt emotions across provenance conditions.

Emotion	*F* (1, 43)	*p*	η^2p
sadness	16.00	.005	.168
focused	6.46	.015	.013
sublime	7.31	.004	.145
like crying	8.29	.006	.162
anxiety	4.25	.045	.090

Table 8. Estimated marginal means for significant interaction effects.

	Provenance	Mean	SE		Provenance	Mean	SE
sadness	*AI*	2.13	0.163	**chills**	*AI*	1.89	0.14
	Human	2.62	0.154		*Human*	2.5	0.153
awe	*AI*	2.28	0.174	**moved**	*AI*	2.23	0.176
	Human	2.83	0.166		*Human*	2.55	0.18
focused	*AI*	3.26	0.16	**nostalgia**	*AI*	2.18	0.17
	Human	3.77	0.199		*Human*	2.73	0.165
sublime	*AI*	2.25	0.147	**tenderness**	*AI*	2.48	0.163
	Human	2.57	0.156		*Human*	3.15	0.145
like crying	*AI*	1.92	0.164	**need to stop/leave**	*AI*	2.83	0.185
	Human	2.29	0.152		*Human*	2.45	0.173
anxiety	*AI*	2.06	0.151	**distracted**	*AI*	2.8	0.196
	Human	2.46	0.153		*Human*	2.24	0.168

Significant main effects of *Prime* emerged across a wide range of emotional responses, indicating that prior information about authorship could influence participants' affective experience (see Table 9 for full results). Overall, priming affected both negatively and positively valenced emotions, as well as more complex aesthetic states. In particular, significant effects were observed for emotions related to distress and arousal (e.g., fear, anxiety, anger, and disgust), as well as for disengaging responses such as distraction, boredom, and the need to stop listening. For example, fear showed a significant effect, F (1, 43) = 18.71, p < .001, η^2p = .303, as distraction, F (1, 43) =

6.48, $p = .006$, $\eta^2p = .131$. At the same time, priming also influenced more aesthetically emotions, including sadness, tenderness, nostalgia, chills, and feeling moved. For instance, sadness, F (1, 43) = 138.36, $p < .001$, $\eta^2p = .269$, and nostalgia, F (1, 43) = 150.54, $p < .001$, $\eta^2p = .259$. See Table 10 for estimated marginal means.

Table 9. Values represent *F, p*, and η^2p on felt emotions across prime conditions.

Emotion	***F* (1, 43)**	***p***	**η^2p**
sadness	15.84	< .001	.269
amused	6.53	.002	.132
need to leave/stop	13.01	< .001	.232
happiness	3.53	.037	.076
distracted	6.48	.006	.131
angry	5.84	.010	.120
fear/scared	18.71	< .001	.303
confused	10.55	< .001	.197
disgusted	37.022	< .001	.463
disappointed	17.00	< .001	.283
embarrassed	262.08	< .001	.379
sublime	7.31	.004	.145
like crying	17.75	< .001	.292
anxiety	21.24	< .001	.331
chills	18.21	< .001	.301
sudden insight	4.49	.027	.095
bored	8.73	.002	.169
tenderness	219.295	< .001	.338
desire	7.98	.002	.157
nostalgia	150.538	< .001	.259
nervous	127.781	< .001	.229
moved	14.32	< .001	.250
awe	41.83	< .001	.197
overwhelmed	10.60	< .001	.196

Table 10. Estimated marginal means for significant interaction effects.

	Prime	**Mean**	**SE**		**Prime**	**Mean**	**SE**		**Prime**	**Mean**	**SE**
	AI	1.86	0.147		*AI*	1.48	0.135		*AI*	2.33	0.186
sadness	*Human*	1.74	0.142	**disgusted**	*Human*	1.4	0.111	**bored**	*Human*	2.08	0.181
	NS	3.52	0.345		*NS*	3.86	0.372		*NS*	3.37	0.351
	AI	3.03	0.226		*AI*	1.76	0.165		*AI*	2.26	0.195
amused	*Human*	3.24	0.206	**disappointed**	*Human*	1.84	0.158	**tenderness**	*Human*	2.16	0.17
	NS	4.02	0.219		*NS*	3.49	0.347		*NS*	4.02	0.299
	AI	2.11	0.183		*AI*	1.58	0.155		*AI*	2.18	0.209
need to stop/leave	*Human*	2.24	0.156	**Embarassed**	*Human*	1.3	0.098	**desire**	*Human*	2.01	0.147
	NS	3.58	0.341		*NS*	3.52	0.3826		*NS*	3.14	0.297

	Prime	Mean	SE		Prime	Mean	SE		Prime	Mean	SE
	AI	1.86	0.147		*AI prime*	2.13	0.185		*AI*	1.89	0.171
happiness	*Human*	1.74	0.142	**sublime**	*Human*	2.03	0.139	**nostalgia**	*Human*	2.01	0.172
	NS	3.52	0.345		*NS*	3.07	0.307		*NS*	3.47	0.333
	AI	2.11	0.183		*AI*	1.52	0.1559		*AI*	1.67	0.149
distracted	*Human*	2.28	0.158	**like crying**	*Human*	1.4	0.0956	**nervous**	*Human*	1.73	0.131
	NS	3.16	0.324		*NS*	3.4	0.413		*NS*	3.1	0.335
	AI	1.7	0.169		*AI*	1.63	0.163		*AI*	1.84	0.193
angry	*Human*	1.8	0.163	**anxiety**	*Human*	1.66	0.147	**moved**	*Human*	1.86	0.159
	NS	2.74	0.347		*NS*	3.5	0.331		*NS*	3.45	0.366
	AI	1.43	0.132		*AI*	1.75	0.158		*AI*	2.28	0.207
fear/scared	*Human*	1.43	0.105	**chills**	*Human*	1.61	0.117	**awe**	*Human*	2.05	0.119
	NS	3.18	0.37		*NS*	3.22	0.304		*NS*	3.34	0.314
	AI	1.76	0.154		*AI*	2.66	0.217		*AI*	2.05	0.170
confused	*Human*	1.93	0.156	**sudden insight**	*Human*	2.38	0.157	**overwhelmed**	*Human*	1.99	0.129
	NS	3.1	0.335		*NS*	3.3	0.305		*NS*	3.23	0.300

**Note:* NS = non-specific

Significant *Prime* × *Provenance* interactions emerged, indicating that the effect of provenance on felt emotions depended on how the excerpts were labelled (see Table 11 for full results). These interactions involved both self-referential states (e.g., self-awareness, awareness of one's body and actions) and positive emotional responses (e.g., happiness, amusement, feeling free, thrill) and negative domains (e.g., fear, confusion, disgust, anxiety). For example, self-awareness showed a significant interaction effect, F (1, 43) = 5.06, p = .011, η^2p = .105, as amusement, F (1, 43) = 7.60, p < .001, η^2p = .150. See Table 12 for estimated marginal means. In other words, follow-up analyses of estimated marginal means showed that excerpts of human provenance received the highest ratings when no prime was provided, whereas the same excerpts were rated lower when attributed to AI. Conversely, AI-provenance excerpts tended to receive higher ratings when attributed to a human source, compared to when they were correctly labelled as AI.

Table 11. Values represent *F*, *p*, and η^2p on felt emotions showing significant Prime × Provenance interactions.

Emotion	F (1, 43)	*p*	η^2p
self-awareness	5.06	.011	.105
awareness of my actions/body	36.83	.035	.079
happiness	3.17	.049	.069
amused	7.60	< .001	.150
free	10.98	< .001	.204
fear/scared	3.90	.024	.083
confused	3.87	.025	.083
disgusted	8.06	.001	.158
thrilled	5.70	.005	.117
embarrassed	58.360	.008	.120
surprised	9.44	< .001	.180
anxiety	17.76	< .001	.292
chill	6.74	.002	.135
nervous	39.587	< .001	.084

Table 12. Estimated marginal means for *Prime Provenance* interaction.

	Prov.	Prime	Mean	SE		Prov.	Prime	Mean	SE		Prov.	Prime	Mean	SE
self-aware	*AI*	AI	3.57	0.30	**Fear/ scared**	***AI***	AI	1.48	0.16	**Surprise**	*AI*	AI	2.32	0.22
		Hum.	3.68	0.27			Hum.	1.50	0.16			Hum.	2.25	0.20
		NS	4.02	0.29			NS	2.93	0.38			NS	3.39	0.31
	Hum.	AI	3.59	0.33		*Hum.*	AI	1.39	0.14		*Hum.*	AI	3.16	0.27
		Hum.	4.18	0.26			Hum.	1.36	0.12			Hum.	2.66	0.23
		NS	3.18	0.31			NS	3.43	0.39			NS	2.66	0.23
Awareness of my actions/ body	*AI*	AI	3.45	0.30	**Confused**	***AI***	AI	1.48	0.16	**Anxiety**	*AI*	AI	1.75	0.21
		Hum.	3.48	0.29			Hum.	1.50	0.16			Hum.	1.70	0.17
		NS	4.09	0.28			NS	2.93	0.38			NS	2.73	0.38
	Hum.	AI	3.59	0.33		*Hum.*	AI	1.39	0.14		*Hum.*	AI	1.50	0.15
		Hum.	3.73	0.25			Hum.	1.36	0.12			Hum.	1.61	0.20
		NS	3.18	0.31			NS	3.43	0.39			NS	4.27	0.37
Happiness	*AI*	AI	3.11	0.23	**Disgusted**	***AI***	AI	1.64	0.21	**Harmony**	*AI*	AI	2.36	0.22
		Hum.	3.25	0.23			Hum.	1.59	0.20			Hum.	2.95	0.25
		NS	4.14	0.26			NS	3.43	0.41			NS	3.64	0.29
	Hum.	AI	3.09	0.23		*Hum.*	AI	1.32	0.12		*Hum.*	AI	3.23	0.24
		Hum.	3.55	0.27			Hum.	1.20	0.08			Hum.	3.39	0.24
		NS	3.45	0.29			NS	4.30	0.39			NS	3.18	0.30

	Prov.	Prime	Mean	SE		Prov.	Prime	Mean	SE		Prov.	Prime	Mean	SE
Amused	*AI*	AI	2.77	0.25	**Thrilled**	***AI***	AI	2.45	0.23	**Nervous**	*AI*	AI	1.68	0.17
		Hum.	3.16	0.25			Hum.	2.64	0.24			Hum.	1.91	0.23
		NS	4.55	0.25			NS	3.68	0.32			NS	2.84	0.35
	Hum.	AI	3.30	0.27		*Hum.*	AI	3.14	0.28		*Hum.*	AI	1.66	0.18
		Hum.	3.32	0.28			Hum.	3.36	0.26			Hum.	1.55	0.15
		NS	3.50	0.29			NS	3.09	0.33			NS	3.36	0.36
Free	*AI*	AI	3.11	0.27	**Embarassed**	***AI***	**AI**	**1.66**	**0.19**	**Desire**	*AI*	AI	2.09	0.22
		Hum.	3.48	0.25			Hum.	1.43	0.17			Hum.	1.84	0.20
		NS	4.16	0.26			NS	3.25	0.41			NS	3.20	0.34
	Hum.	AI	3.89	0.26		*Hum.*	AI	1.50	0.17		*Hum.*	AI	2.27	0.25
		Hum.	4.16	0.25			Hum.	1.16	0.08			Hum.	2.18	0.23
		NS	3.14	0.27			NS	3.80	0.38			NS	3.07	0.33

**Note:* NS = non-specific; AI = Artificial Intelligence; Hum. = Human.

Perceived general affect

A significant Prime × Provenance interaction emerged for both positive affect, F (1, 43) = 10.22, $p < .001$, η^2p = .192, and negative affect, F (1, 43) = 5.73, p = .005, η^2p = .118 (see Table 13 for descriptives). In other words, follow-up analyses of estimated marginal means showed that positive and negative affect varied depending on the combination of actual provenance and assigned label. Consistent with previous findings observed for aesthetic evaluations and felt emotions, excerpts tended to receive more favorable affective evaluations when attributed to a human source, whereas AI attribution was associated with less positive and, in some cases, more negative affective responses.

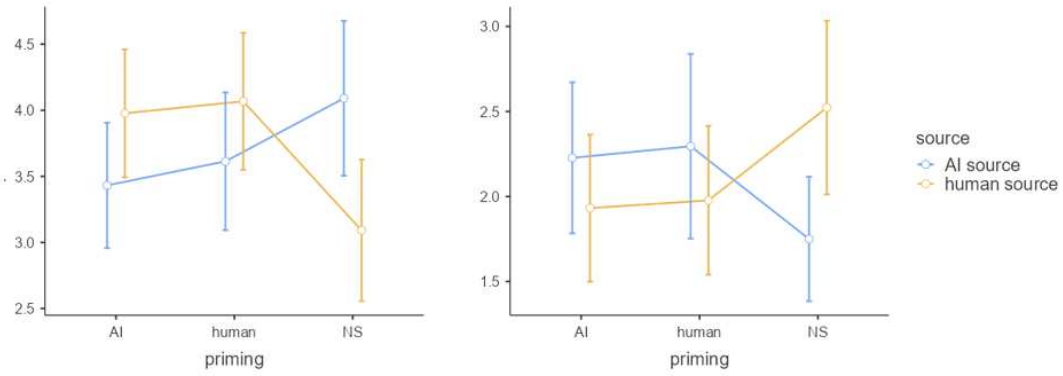


Figure 4. Interaction effects of *Prime* and *Provenance* on positive and negative general affect (NS = nonspecific; AI = Artificial Intelligence).

Table 13. Estimated marginal means for *Prime Provenance* interaction (NS = nonspecific; AI = Artificial Intelligence; Hum. = Human).

	Prov.	Prime	Mean	SE
Positive affect	*AI*	AI	3.43	0.23
		Hum.	3.61	0.25
		NS	4.09	0.29
	Hum.	AI	3.98	0.24
		Hum.	4.07	0.26
		NS	3.09	0.26
Negative affect	*AI*	AI	2.23	0.22
		Hum.	2.30	0.27
		NS	1.75	0.18
	Hum.	AI	1.93	0.21
		Hum.	1.98	0.22
		NS	2.52	0.25

Perceived Creativity

Our analyses revealed no significant main effects of prime or provenance, or any prime × provenance interactions, for perceived creativity measures (i.e., novelty, complexity, and overall perceived creativity).

Perceived emotional intention

The three excerpts were designed to convey the following emotional clusters: (1) need to leave/stop, sadness, and confusion; (2) amusement, freedom, self-awareness, and stimulation; and (3) focus, anger, disappointment, self-awareness, awareness of one's actions/body, and stimulation. Detailed descriptive statistics for perceived emotional intention, reported separately for each excerpt and provenance condition, are provided in the Supplementary Materials. These tables report mean ratings (M) and standard deviations (SD), separately by excerpt, provenance, and priming condition. These data offer a detailed overview of how listeners identified intended emotional states across the different experimental conditions.

Discussion

In this study, we investigated how compositional origin and authorship attribution influence listeners' aesthetic, emotional, and creativity-related responses to short musical excerpts composed either by a human or by a state-of-the-art AI model [22,51]. By dissociating actual provenance from assigned labels, we were able to assess not only whether AI- and human-generated music elicited comparable responses, but also how prior expectations influenced perceived emotional intention [51-54].

The first important result concerns aesthetic evaluation. Across several evaluative dimensions, excerpts of human provenance were rated more positively than AI-generated ones, being judged as more meaningful, good, beautiful, sincere, intimate, and serious. At the same time, these effects were not entirely fixed, as significant *Prime* × *Provenance* interactions showed that evaluative judgments were also shaped by contextual framing. In particular,

some AI-generated excerpts received more favorable ratings when no authorship information was provided. These findings suggest that listeners' aesthetic responses are influenced both by the actual source of the music and by expectations activated through priming. They support the idea that judgements of artistic quality are mediated by assumptions about agency, authorship, and authenticity [18,19,22,51].

A second major finding concerns felt emotions. Human-generated excerpts elicited a broader range of emotions associated with aesthetic depth and self-referential engagement, including sadness, awe, nostalgia and tenderness. By contrast, AI-generated excerpts were more strongly associated with disengaging or distancing responses, such as distraction and the need to stop listening. These results suggest that, although AI-generated music can clearly produce emotional responses, human-composed music remains more likely to evoke affective states that listeners experience as deeper, more introspective, or more aesthetically rich. Importantly, emotional responses were also modulated by priming: across several emotions, labels influenced not only the intensity of what participants felt, but also the kinds of affective experiences they reported. This reinforces the view that emotional engagement with music depends not only on what listeners hear, but also on what they believe they are hearing and who they believe is behind it [37,39,51].

A third aspect concerns perceived emotional intention. The descriptive data suggests that listeners attributed intended emotions to both human- and AI-generated excerpts, indicating that AI-generated music was not simply excluded from the domain of expressive communication. Finally, the absence of significant effects for perceived creativity is particularly noteworthy. Neither actual provenance nor attribution significantly influenced judgments of novelty, complexity, or overall creativity. This result suggests that, at least in the present experimental setting, listeners did not sharply distinguish between human- and AI-generated excerpts in terms of creative value. In one sense, this finding complicates stronger versions of the view that AI-generated music is necessarily perceived as less creative than human-made music or, more generally, the belief that high-quality AI-generated work is assumed to be human-made [55]. Taken together, these results suggest that, even in the absence of differences in perceived creativity, AI-generated music was still experienced as carrying emotional intentions, particularly when no explicit authorship label was provided. As AI becomes increasingly embedded in everyday life, the psychological processes underlying music appreciation may shift toward greater inclusivity of non-human agency, possibly reflecting a growing openness to AI-generated music in the digital era [56,57].

Overall, the present findings point to a differentiated picture of how listeners respond to AI-generated music. Human-generated excerpts were generally preferred on aesthetic grounds and were more likely to elicit emotionally rich and introspective responses. AI-generated excerpts, however, were still capable of being perceived as expressive and emotionally meaningful. At the same time, the consistent role of priming shows that responses to music are shaped not only by the acoustic properties of the stimuli, but also by culturally and psychologically grounded expectations about authorship and authenticity [54].

An important limitation is that our study focused exclusively on instrumental music. This was a deliberate methodological choice, intended to isolate specific perceptual and emotional mechanisms without the added influence of lyrics, vocal timbre or semantic content. Future research should therefore move toward a more comprehensive account by including a wider range of musical genres and by examining not only instrumental excerpts, but also vocal and mixed musical forms. This seems especially relevant in the context of AI-generated

music, where the human voice may act as a particularly powerful cue for humanness, emotional expressivity, and authorship attribution. In addition, future studies could examine the affective dynamics of listening in real time, using methods to track how emotional responses unfold during the listening experience itself [58].

Conclusion

In conclusion, the present study should be understood as an initial empirical step toward a broader research agenda on music, listeners, and artificial intelligence. Before asking whether AI can replace the musician, it is necessary to understand how listeners experience music when the human source of creation becomes uncertain, displaced, or redefined. From this perspective, the present findings suggest that AI-generated music can be perceived as emotionally and aesthetically meaningful, but that listeners still respond differently to it across important evaluative and affective dimensions. This makes the question of substitution far more complex than a simple comparison of technical output and suggests the need for further research on the psychological, musical, and cultural conditions under which AI-generated music is received.

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Priming		Stimulated	Focused	Happy	Amused	Free	Need to leave/stop	Sad	Distracted	Angry	Fear/scared	Confused	Disgusted	Self aware	Disappointed	Bored	Nostalgic	Tenderness
	M	4.00	3.63	4.50	**4.75**	4.44	2.06	**1.94**	**2.06**	**1.56**	**1.44**	**2.44**	**1.50**	3.75	**1.81**	**2.06**	1.88	3.00
AI	**SD**	2.10	1.93	1.55	1.81	2.13	1.61	1.29	1.88	1.26	1.21	1.82	1.10	2.05	1.42	1.81	1.45	1.86
	M	3.56	3.63	4.00	4.31	**5.25**	**2.50**	1.69	1.88	1.44	1.31	1.44	1.19	**3.81**	1.50	1.69	**2.44**	**3.38**
Human	**SD**	1.63	1.67	1.26	1.49	1.44	1.55	1.20	1.31	1.03	0.479	0.727	0.544	1.83	1.03	1.14	1.55	1.63
	M	**4.33**	3.67	4.67	4.42	4.25	2.08	1.17	1.83	1.00	1.00	1.33	1.25	3.50	1.33	1.50	1.50	2.42
NS	**SD**	2.10	2.31	1.87	2.23	2.09	1.62	0.39	1.19	0.00	0.00	0.49	0.86	1.88	1.15	1.73	1.24	1.31

Priming		Thrilled	Embarassed	Surprised	Sublime	Like crying	Anxiety	Aware of my body/actions	Chills	Harmony	Overwhelmed	Awe	Sudden Insight	Moved	Frustrated	Curious	Longing
	M	3.88	**1.44**	**2.88**	1.94	**1.44**	**1.56**	3.25	1.88	3.38	**2.69**	2.63	3.19	2.06	**1.63**	3.63	2.81
AI	**SD**	1.78	0.89	1.59	1.29	0.727	1.03	1.91	1.54	1.86	1.92	1.82	2.01	1.77	1.26	2.09	1.94
	M	4.13	1.31	2.56	**2.81**	1.31	1.31	**3.63**	**2.25**	**4.00**	2.06	**3.88**	**3.38**	2.75	1.38	**3.94**	2.00
Human	**SD**	1.82	0.873	1.71	2.10	0.704	0.704	1.89	1.98	2.13	1.39	2.36	1.75	1.84	0.88	1.24	1.21
	M	**3.92**	1.00	1.83	2.42	1.17	1.00	3.50	1.67	3.83	2.17	2.92	2.67	2.00	1.08	3.50	**2.25**
NS	**SD**	1.93	0.00	1.40	1.68	0.577	0.00	1.73	1.30	1.90	1.11	1.78	1.72	1.76	0.28	1.88	2.05

Table S1. Descriptives of AI-generated first excerpts.

Priming		Stimulated	Focused	Happy	Amused	Free	Need to leave/stop	Sad	Distracted	Angry	Fear/scared	Confused	Disgusted	Self aware	Disappointed	Bored	Nostalgic	Tendernes
	M	3.88	4.06	4.25	4.63	4.06	1.38	1.25	1.69	**1.50**	1.25	1.31	**1.19**	3.56	1.25	1.44	1.88	**2.31**
AI	**SD**	1.54	1.53	1.61	1.59	1.77	1.02	0.58	1.20	1.03	1.00	0.70	0.75	1.90	0.77	1.09	1.31	1.30
	M	3.56	3.63	4.00	4.31	**5.25**	**2.50**	**1.69**	**2.58**	**1.50**	1.25	2.00	1.17	**3.67**	**1.42**	1.67	**1.92**	2.17
Human	**SD**	1.63	1.67	1.26	1.49	1.44	1.55	1.20	2.11	1.24	0.86	1.54	0.58	1.67	1.16	1.07	1.78	1.40
	M	**4.88**	**4.56**	**4.88**	**5.50**	4.81	**2.50**	1.56	1.75	1.13	**1.50**	**2.19**	**1.19**	3.63	1.38	**2.13**	1.69	2.19
NS	**SD**	2.25	2.13	1.75	1.59	1.56	1.75	1.21	1.44	0.50	1.10	1.94	0.40	2.19	0.71	2.16	1.35	1.42

Priming		Thrilled	Embarassed	Surprised	Sublime	Like crying	Anxiety	Aware of my body/actions	Chills	Harmony	Overwhelmed	Awe	Sudden Insight	Moved	Frustrated	Curious	Longing
	M	3.31	1.31	3.06	2.63	1.25	1.25	3.63	2.19	3.50	2.00	2.88	**3.38**	**2.19**	1.31	3.63	2.75
AI	**SD**	1.70	0.60	1.95	1.59	1.00	0.68	1.82	1.52	1.67	1.63	1.78	1.63	1.76	0.79	1.67	1.77
	M	2.83	**1.67**	2.08	2.33	**1.33**	**1.42**	3.33	**2.75**	**3.58**	**3.00**	2.92	3.25	1.83	**2.00**	3.42	2.42
Human	**SD**	1.90	1.37	1.24	1.78	0.88	0.90	1.72	2.05	1.38	1.65	1.73	1.60	1.27	1.65	2.02	1.73
	M	**4.31**	1.31	**3.50**	**2.88**	1.19	1.19	**4.00**	2.06	3.06	2.44	**3.25**	2.75	1.94	1.31	**4.19**	**3.06**
NS	**SD**	1.85	0.87	1.83	1.86	0.54	0.54	2.13	1.88	1.44	1.82	2.29	1.57	1.34	1.01	1.97	2.24

Table S2. Descriptives of AI-generated second excerpts.

Priming		Stimulated	Focused	Happy	Amused	Free	Need to leave/stop	Sad	Distracted	Angry	Fear/scared	Confused	Disgusted	Self aware	Disappointed	Bored	Nostalgic	Tenderness
	M	4.67	4.50	3.50	3.75	4.08	2.25	1.33	2.08	3.17	3.08	2.58	1.25	3.75	2.00	1.67	1.75	1.67
AI	**SD**	1.50	1.83	1.83	1.60	1.44	1.76	0.49	1.38	2.33	2.11	2.15	0.62	1.76	1.65	1.61	1.76	1.37
	M	**5.44**	**5.44**	3.25	3.81	4.31	3.38	2.19	1.31	4.75	2.06	1.88	1.44	4.00	1.69	1.31	1.69	1.63
Human	**SD**	1.71	1.55	1.77	1.76	1.92	2.19	1.38	0.60	1.69	1.48	1.45	1.26	2.37	1.08	0.70	1.14	1.26
	M	5.31	4.75	**4.56**	**5.06**	**5.19**	**5.13**	**5.31**	**5.31**	**4.81**	**5.69**	**4.88**	**5.94**	**5.13**	**5.25**	**6.31**	**5.25**	**5.56**
NS	**SD**	1.14	1.48	1.36	1.44	1.52	1.86	2.30	2.21	1.80	2.06	2.25	1.95	1.67	2.38	1.54	2.18	2.13

Priming		Thrilled	Embarassed	Surprised	Sublime	Like crying	Anxiety	Aware of my body/actions	Chills	Harmony	Overwhelmed	Awe	Sudden Insight	Moved	Frustrated	Curious	Longing
	M	4.42	1.25	3.17	2.42	1.33	2.42	3.25	2.50	3.42	3.25	2.92	3.42	1.83	2.42	3.75	3.42
AI	**SD**	1.73	0.87	2.25	1.93	1.15	1.68	1.82	1.83	1.68	2.05	2.11	2.11	1.19	1.31	2.05	1.88
	M	4.31	1.19	4.19	2.31	1.25	2.63	3.44	2.81	3.00	3.81	3.44	2.56	2.44	3.31	3.38	3.25
Human	**SD**	2.09	0.54	2.29	1.89	0.775	1.82	2.16	2.34	2.13	1.94	2.22	2.00	2.03	1.92	1.96	1.81
	M	**4.81**	**6.81**	**5.25**	**5.13**	**5.94**	**5.75**	**5.00**	**4.88**	**4.69**	**4.56**	**4.88**	**5.13**	**5.19**	**4.56**	**4.94**	**5.63**
NS	**SD**	1.38	0.75	1.73	1.67	1.95	1.95	1.79	2.13	1.82	2.03	1.86	1.75	2.01	2.25	1.48	1.59

Table S3. Descriptives of AI-generated third excerpts.

Priming		Stimulated	Focused	Happy	Amused	Free	Need to leave/stop	Sad	Distracted	Angry	Fear/scared	Confused	Disgusted	Self aware	Disappointed	Bored	Nostalgic	Tenderness
	M	**4.19**	**4.50**	2.75	2.50	4.38	3.13	3.88	1.31	1.31	**2.06**	1.81	1.25	3.81	1.75	1.31	4.13	**4.81**
AI	**SD**	2.01	2.16	1.77	1.67	1.96	2.19	2.09	0.70	0.70	1.48	1.11	0.77	2.10	1.34	0.79	2.50	2.01
	M	3.81	3.88	**3.31**	**2.63**	**4.56**	2.44	3.13	1.56	1.69	1.81	1.88	1.13	**4.06**	2.50	1.13	**4.75**	4.19
Human	**SD**	1.76	1.45	1.70	1.75	1.36	2.06	1.82	1.03	1.25	1.47	1.54	0.50	1.73	1.67	0.34	1.88	1.97
	M	2.58	3.17	2.25	2.08	3.58	**3.33**	**4.33**	**1.83**	**1.83**	2.00	**2.42**	**1.33**	3.17	**3.75**	**1.92**	4.42	3.50
NS	**SD**	1.93	2.04	1.82	1.38	2.31	2.06	1.67	1.03	1.19	1.48	1.44	0.78	1.59	2.05	1.83	1.83	1.62

Priming		Thrilled	Embarassed	Surprised	Sublime	Like crying	Anxiety	Aware of my body/actions	Chills	Harmony	Overwhelmed	Awe	Sudden Insight	Moved	Frustrated	Curious	Longing
	M	**4.94**	1.19	**3.13**	**3.75**	**3.75**	1.44	**4.06**	3.44	**5.00**	3.69	**4.19**	**3.19**	**4.50**	1.44	**3.50**	**3.50**
AI	**SD**	2.11	0.54	2.16	2.05	2.02	0.73	2.32	1.97	1.90	2.02	2.17	2.17	2.00	0.81	2.16	2.13
	M	4.69	**1.25**	2.25	2.69	3.50	1.63	3.63	**3.56**	4.63	2.31	3.44	2.56	4.19	**1.50**	3.31	2.50
Human	**SD**	1.45	0.57	1.73	1.78	1.93	1.31	1.59	1.79	1.59	1.78	1.79	1.59	1.47	0.82	1.70	1.46
	M	4.25	1.08	1.67	2.75	3.42	**1.92**	3.25	2.67	3.92	**3.75**	2.50	2.42	3.75	**1.50**	2.00	1.92
NS	**SD**	2.09	0.29	0.98	1.82	2.15	1.62	1.71	1.97	1.78	1.86	2.02	1.83	2.14	0.90	1.04	1.56

Table S4. Descriptives of human-generated first excerpts.

Priming		Stimulated	Focused	Happy	Amused	Free	Need to leave/stop	Sad	Distracted	Angry	Fear/scared	Confused	Disgusted	Self aware	Disappointed	Bored	Nostalgic	Tenderness
	M	4.38	3.81	5.06	5.00	**4.63**	**1.69**	1.31	**1.94**	**1.56**	1.25	**1.31**	1.25	**3.88**	1.38	1.56	1.81	2.88
AI	**SD**	1.71	1.60	1.65	1.59	1.82	1.14	1.01	1.48	1.36	1.00	1.01	1.00	1.78	1.26	1.09	1.28	1.41
	M	4.42	2.83	4.67	**5.25**	4.33	1.42	1.33	1.92	1.33	1.33	1.17	1.08	2.83	1.42	1.67	1.50	3.17
Human	**SD**	1.73	1.53	1.97	1.48	1.83	0.99	1.15	1.51	0.88	0.65	0.39	0.28	1.47	1.16	1.61	1.24	1.85
	M	**5.00**	**5.25**	**5.63**	**5.25**	2.00	1.50	**1.63**	1.44	1.50	**1.56**	1.06	**3.75**	1.25	**4.00**	**1.81**	**2.56**	**4.06**
NS	**SD**	1.79	1.61	1.41	1.57	1.71	1.03	1.41	1.26	1.26	1.26	0.25	2.38	0.57	1.63	1.28	1.26	1.73

Priming		Thrilled	Embarrassed	Surprised	Sublime	Like crying	Anxiety	Aware of my body/actions	Chills	Harmony	Overwhelmed	Awe	Sudden Insight	Moved	Frustrated	Curious	Longing
	M	**3.81**	1.25	**3.00**	**3.13**	**1.25**	1.31	**3.44**	2.38	**3.88**	1.69	**2.63**	**2.94**	**2.38**	1.44	**3.44**	2.75
AI	**SD**	1.97	0.77	1.75	1.71	0.77	1.01	1.90	1.63	1.78	1.14	1.93	1.91	1.86	1.21	1.67	1.77
	M	3.92	1.58	2.42	2.67	1.08	1.42	3.33	2.25	4.33	2.17	2.33	3.00	2.00	1.08	3.58	2.08
Human	**SD**	1.62	1.24	1.51	1.92	0.28	1.16	1.44	1.76	1.30	1.64	1.67	2.04	1.81	0.28	1.83	1.51
	M	1.25	**3.19**	2.69	1.19	**1.25**	**3.38**	1.56	**3.50**	1.88	**2.75**	2.38	2.13	1.88	**1.69**	3.31	**4.25**
NS	**SD**	0.68	1.47	1.08	0.54	0.44	1.67	1.36	1.75	1.20	1.73	1.41	1.59	1.26	1.20	2.02	1.73

Table S5. Descriptives of human-generated second excerpts.

Priming		Stimulated	Focused	Happy	Amused	Free	Need to leave/stop	Sad	Distracted	Angry	Fear/scared	Confused	Disgusted	Self aware	Disappointed	Bored	Nostalgic	Tenderness
	M	4.08	4.00	3.75	4.08	4.42	1.92	1.67	1.58	2.00	1.50	1.83	1.50	4.08	2.00	2.00	1.83	1.92
AI	**SD**	1.98	1.71	1.71	1.68	1.78	1.51	1.37	0.97	1.65	1.00	1.03	1.17	2.15	1.41	1.60	1.53	1.24
	M	**5.63**	4.44	4.44	3.94	4.38	2.19	2.13	1.50	3.88	2.44	1.94	1.19	3.94	1.50	1.63	1.75	1.44
Human	**SD**	1.41	2.31	2.22	2.24	2.28	1.97	1.54	1.21	2.06	1.90	1.65	0.40	2.49	1.10	1.71	1.24	1.03
	M	5.25	**4.56**	**4.38**	**4.88**	**5.06**	**5.44**	**5.75**	**6.25**	**5.44**	**6.31**	**6.31**	**6.63**	**4.75**	**6.25**	**6.25**	**5.38**	**5.88**
NS	**SD**	1.34	1.55	1.50	1.50	1.34	2.10	1.98	1.39	1.82	1.54	1.49	1.02	1.91	1.65	1.65	2.03	1.89

Priming		Thrilled	Embarrassed	Surprised	Sublime	Like crying	Anxiety	Aware of my body/actions	Chills	Harmony	Overwhelmed	Awe	Sudden Insight	Moved	Frustrated	Curious	Longing
	M	3.42	1.33	1.92	1.92	1.42	2.08	3.50	1.83	3.08	2.00	2.00	2.42	1.58	2.33	2.83	3.00
AI	**SD**	1.93	0.651	1.38	1.24	1.16	1.16	2.11	1.64	1.56	1.35	1.48	1.68	0.996	1.67	1.99	2.37
	M	4.25	1.63	3.13	2.25	1.75	1.94	4.31	2.63	3.19	2.75	2.94	2.94	2.13	2.69	3.88	3.63
Human	**SD**	2.11	1.71	1.86	1.61	1.65	1.73	2.06	2.03	1.76	2.02	2.11	1.91	1.75	2.09	2.09	1.78
	M	**4.75**	**6.81**	**4.31**	**4.56**	**6.19**	**5.69**	**4.94**	**5.44**	**4.38**	**5.13**	**4.88**	**4.75**	**5.00**	**5.19**	**4.44**	**5.13**
NS	**SD**	1.34	0.75	1.85	1.82	1.80	2.09	1.81	1.75	1.71	1.86	1.78	2.02	2.28	2.20	1.50	1.63

Table S6. Descriptives of human-generated third excerpts.

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