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Art promotes exploration of negative content

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Experiencing negative content through art has a unique power to transform our perceptions and foster engagement. While this idea has been widely discussed, empirical evidence is scarce, since experimental testing of art experiences poses significant challenges. Here, we aimed to fill this gap by quantifying and comparing individuals' preference for engaging with art and nonart depicting matched negative content via two behavioral measures: the choice to engage vs. avoid and the duration of engagement. Across five studies (total N = 1,063), results revealed a preference for engaging with negative content through art as compared to nonart. Specifically, people more frequently chose to view negative art images, and looked at them for longer, as compared to photographs of similar content. To understand what underlies this preference for art, we examined the psychological impact of engaging with negative content through art and nonart depictions. Results showed that art experiences evoked higher aesthetic appreciation, while nonart gave the viewer a more realistic perspective and was emotionally more costly to engage with. Further, our analysis of engagement motives revealed that individuals were driven by expectations of aesthetic appreciation, thought-provocativeness, and an original perspective, both in art and nonart, while they were discouraged by emotional costs, even more strongly when engaging with nonart. These findings align with the idea of aesthetic distance, where art, as an abstraction of reality, facilitates exploration of negative content with less emotional costs and the prospect of aesthetic rewards.

art | aesthetic distance | morbid curiosity

Significance

From depictions of Judith beheading Holofernes to Goya's Black Paintings and Picasso's Guernica, we are drawn to looking at suffering and pain presented on the canvas. While curiosity in unpleasant things is not reserved for art, as demonstrated by true crime's popularity and rubbernecking, art may uniquely redefine the experience of the negative and secure attention to macabre. Here, we examined whether people are particularly drawn to negative content in the arts using behavioral indicators of engagement. Our results revealed a marked preference for engaging with negative content through art, explained by differences in engagement outcomes and motives. These results provide empirical support for the idea that the arts are a powerful communicative tool, specifically for presenting otherwise costly-to-engage-with information.

Curiosity for negative content is a widespread phenomenon in daily life, with individuals intentionally seeking out and engaging with aversive information. Slowing down to look at road accidents and the popularity of true crime documentaries are common examples. In the realm of art, memento mori—a reminder of mortality—has been a popular theme across eras and styles. Artworks that are haunting but undeniably beautiful, difficult but tempting to behold gathered immense attention, such as Caravaggio's Medusa and Kahlo's insightful depictions of chronic pain. The present research examines curiosity for negative content with a focus on the arts, testing whether art depictions (i.e., paintings) of negative situations promote greater engagement than matched nonart depictions (i.e., photographs). Additionally, we explore the psychological impact and underlying motives of engagement with negative content in both media to understand peoples' preference for the arts.

Recent research demonstrated that people are drawn to viewing depictions of harm, violence, and death (i.e., morbid curiosity; ref. 1), and suggests a set of fundamental psychological functions and beneficial outcomes of curiosity for the negative. People seek out negative content for its informational (e.g., knowledge acquisition), emotional (e.g., experiencing meaningful emotions), and social (e.g., engagement with others' experience) value (2). Moreover, negative information is less frequent and more diverse as compared to positive information in the environment (3). As such, seeking out and engaging with negative content is fruitful for gaining information that is rare. Such information can then be used to build a realistic model of the world, gain experience, and prepare for the possibility of experiencing negative events first-hand (2, 4). The drawback is that engaging with negative content is costly, both mentally (e.g., effortful) and affectively (e.g., it often evokes negative emotions). This conflicting state of wanting the information (5) without the certainty of enjoyment or ability to cope makes a cost–benefit analysis particularly salient, ultimately determining approach or avoidance. Accordingly, certain factors that influence the balance could encourage or discourage exploration (2).

One medium that has seen individuals commonly seek out and engage with negative content, theorized to encourage exploration by altering costs and benefits, is the arts (e.g., ref. 6). From Shakespeare's Hamlet to Munch's Scream, an abundance of negative emotions and themes has been attributed to most prominent works of art; speculated to be conveyed by artists and reported by audiences in response. In aesthetics, art has been theorized as a marked medium for the experience of the negative (e.g., artistic license; ref. 7). Most

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prominently, the Distancing-Embracing model (8) posits that art context triggers distancing mechanisms that modify the appraisal of negative emotions, while positive emotions prompted by aesthetic qualities interact with and integrate the negative ones into a pleasurable experience.

The idea that art reshapes our experiences of the negative rests upon unique components associated with art experiences, such as aesthetic distance (9). In essence, when engaging with art, individuals are typically aware that they are partaking in an as-if world. This awareness includes a sense of personal safety. After all, visual or literary depictions included in art cannot directly harm the viewer. Further, the viewer has agency over their art engagement; it is often self-initiated, -sustained, and -terminated, based on personal motives (8). Since control over an aversive situation has been shown to increase physical pain tolerance (10), and having a choice in a negative situation (versus being subjected to it without a choice) reduced negative emotional experience (11), the activation of art schema may recruit resources for coping with negative content. In turn, when individuals have high coping potential, they may be more willing to approach an aversive situation and persist through engagement (12, 13). In the present work, we maintained these crucial ingredients of art experiences, evaluating individuals' deliberate decisions to initiate, sustain, and terminate their engagement with art (and nonart) medium, rather than exposing people to art experiences outside of their control.

Another distinctive aspect of aesthetic distance has to do with the representational nature of the arts, specifically, its association with fictional (vs. factual) representations of reality (14, 15). Viewing a murder scene with the implicit assumption that the victim is fictional, and their suffering has been made-up, undoubtedly alters the witnesses' emotional reactions compared to what they would be in response to a real-life event of a similar nature. This does not imply that art is void of information about the world, nor that all art is purely fictional. In fact, even when dealing with fictional content, impactful artworks often blur the boundaries between imagination, fiction, and reality. Nonetheless, despite becoming fully absorbed in an artistic encounter (regardless of the fictional status), we likely retain an awareness of the art medium, and process information with an *aesthetic attitude* (16). Various factors contribute to this, including preconceived notions and expectations of art experiences, such as finding aesthetic pleasure in formal elements and anticipating outcomes based on genre and medium conventions. For instance, while reading a tragic novel, one may experience profound sadness in response to the protagonist's misfortunes, yet find consolation and resilience in aspects such as the beauty of the wording, creating a more positive backdrop for processing accompanying negative emotions (8).

Moreover, art, being rooted in representation, inherently involves abstraction. The meaning conveyed by artworks is open to multiple interpretations and as art transcends the physical form of things, it encourages viewers to delve into abstract concepts to derive meaning (15). As such, the events could be construed in ways that are more detached from individual experience, with emphasis on the "bigger picture" or experiences that are globally shared among humans (17). This allows individuals to shift their focus away from the immediate, personal impact of the negative content, and contemplate its broader significance. For instance, individuals exposed to trailers featuring violent content (e.g., blood and gore) were inclined to watch the film to the extent they believed it would help them understand real-world violence (18). Moreover, Vivanco Carlevari et al. (19) demonstrated that people engage with cultural expressions (e.g., books, movies) that involve stories of others' suffering to gain insight into the human condition and expand their knowledge about the world. This is not to say that the viewer does not engage with meaning and interpretation through nonart negative content, but that meaning making and reflection might not be clouded by concern of imminent harm or danger when engaging with art. Here, negative content is filtered through what has been suggested as the *aesthetic valve*, turning uncertainty into curiosity, as opposed to anxiety, encouraging exploration (20).

All in all, the interplay between the elements rooted in reality and artistic interpretation may allow the viewer to engage with the gravity of the negative content with the support of imaginative and aesthetically pleasing aspects of the art experience. Indeed, scholars theorized art as an empowered medium for presenting unpleasant, offensive, and unlikable information (i.e., artistic license; ref. 7), promoting exploration. Still, the premise that art is a unique medium for engaging with the negative has rarely been empirically tested. Methodologically, the variability of artworks and the difficulty in establishing effective control conditions present obstacles in studying the question. Furthermore, there are disciplinary boundaries; theorizing on (negative) art experiences is led by the humanities with relatively few (empirical) contributions from social sciences. Nevertheless, this diversity of perspectives underlines the potential for far-reaching implications in using art as a communicative tool. Is the art medium indeed unique in how we interact with the negative, fostering exploration? To answer this question empirically, we quantified the preference for art with negative content using engagement behavior and experimentally compared it to matched nonart experiences.

We investigated whether art facilitates engagement with negative content using a paradigm that allowed participants the choice to see or avoid art and nonart images based on image descriptions (Fig. 1). Across five online experiments, we further examined how long participants (freely) engaged with art and nonart that they chose to see (Studies 1, 2, and 4), or were exposed to (Studies 3A and 3B). We employed artworks created by artists that depicted moral violations (e.g., people fighting) or moral virtues (e.g., a mother caring for her child) to operationalize art experiences. Control stimuli (i.e., nonart) consisted of photos that were matched to the artworks in content but perceived as significantly less artistic than the artworks (*SI Appendix*, *Pilot Study*). As such, our design advances previous literature by leveraging voluntary engagement behavior, and mirrors real-life information seeking, directly and robustly capturing engagement with negative content in art and nonart. In addition, we compared experiential outcomes of engaging with moral violations in the art and nonart context, drawing from literature on art experiences, as well as (morbid) curiosity (e.g., refs. 8 and 19), extending beyond outcomes previously investigated in art experiences. This provided insights into the differences between during- and postengagement experiences for art and nonart media. Next, to understand what drives engagement with negative content in art and nonart media, we examined which motives predicted engagement decisions (see ref. 21 for a similar approach), a mechanism previously unexplored in work on art experiences. Through this series of studies, we quantified whether there is a preference for art in engaging with negative content and examined the possible reasons behind this preference.

Our results paint a detailed picture of how art influences engagement with negative content, highlighting the attributes that draw individuals to art and the unique benefits or protections art provides compared to nonartistic depictions. Across studies, we found support for several preregistered hypotheses (https://osf.io/9u86w/). The first confirmed hypothesis was that art promoted engagement with negative content. Specifically, participants were more likely to choose to view negative content in the form of art. Moreover, across five experiments, participants engaged with artworks with negative content for longer, compared to negative

nonart images. Differences in engagement behavior were rooted in differences in engagement outcomes, while motives for engaging with art and nonart negative content were shared. The second confirmed hypothesis was that art experiences evoked higher aesthetic appreciation, while nonart gave the viewer a more realistic perspective and was more emotionally costly to engage with. Last, participants were drawn to negative content that they expected to be aesthetic and thought provoking, and that provided an original perspective, while they were deterred by emotional cost associated with engagement. Our results are in line with the idea of aesthetic distance promoting engagement with negative content (e.g., ref. 8), whereby the diminished realistic perspective and aesthetic appreciation that characterize art experiences contribute to less emotional cost associated with engagement, promoting exploration of negative content. In all, we deliver robust empirical evidence that arts stand as a powerful communicative tool to convey otherwise costly-to-engage-with information.

Results

People (Choose to) Engage with Negative Content Through Art More than Through Nonart. Across five studies, we employed two behavioral measures to compare individuals' engagement with art and nonart. One of the behavioral measures was choice, whether the participant chose to engage with an image (i.e., clicked "Yes" to see the image) based on the image description. The second was an unobtrusive behavioral measure where we tracked the engagement duration of the participants when they were presented with the images and could freely move on to the next page stopping the engagement. The following results represent confirmatory analyses of hypotheses that were preregistered on OSF (https://osf.io/9u86w/registrations).

In Study 1, we employed a between-subjects design where participants (N = 200) chose to engage or avoid positive and negative images based on image descriptions, either in an art or nonart context (Fig. 1*A*). To test whether art context promoted engagement with negative content, we fit a mixed-effects logistic regression on choice (engage/avoid) with participant and image description as random intercepts, including the context (art/nonart), valence (positive/negative), and their interaction as fixed effects. Valence predicted engagement such that people were more likely to engage with positive than negative images, $\chi^2(1) = 96.44$, $P < 0.001$. As hypothesized, this effect was qualified by a significant interaction between context and valence, $\chi^2(1) = 34.65$, $P < 0.001$, where participants were more likely to engage with negative images in the art context (Prob. = 0.73) than in the nonart context (Prob. = 0.47), $\chi^2(1) = 10.49$, $P = 0.001$, whereas this effect was absent for positive images (overall Prob. = 0.93), $\chi^2(1) = 0$, $P = 0.96$. The main effect of context was not significant, $\chi^2(1) = 2.66$, $P = 0.1$.

After Study 1, we removed depictions of moral virtues (i.e., positive stimuli) from the design and focused on negative content, hypothesizing that art promotes engagement. In Study 2, for a more stringent test of peoples' preference for art when engaging with negative content, we pitted the two media against each other and examined which individuals choose to engage with. Thus, in Study 2, we employed a within-subjects design where participants (N = 119) chose to engage with either an artwork or a nonart image that matched the presented moral violation description (Fig. 1*B*). We predicted that participants would choose the artwork for the majority of engagement decisions they make. We computed art choice scores by the fraction of choices people opted for the artwork across 10 image choices made (i.e., X/10). We then conducted a one-tailed one-sample t-test to examine whether

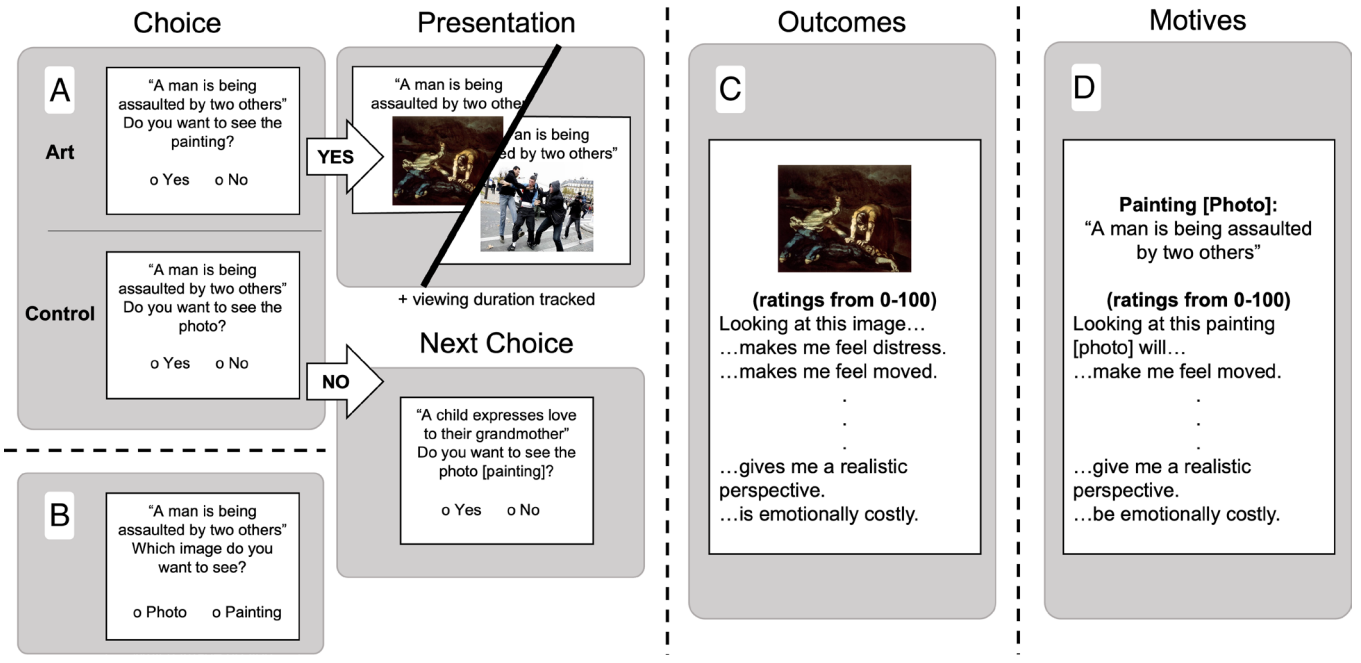

Fig. 1. Sample task events for Study 1 to 4. (*A* and *B*) Choice-paradigm measuring preference for art when engaging with negative content. In Study 1 (*A*) participants chose to view or avoid art and nonart images based on descriptions (10 positive and 10 negative). In Study 2 (*B*) participants chose between seeing a painting or a photo matching the negative content description. In both (*A*) and (*B*) participants are presented with the images they choose to see and can proceed to the next description freely. Engagement duration is timed based on how long they stay on the presentation page. (*C*) Task measuring outcomes for engaging with negative content through art and nonart. In Experiments 3A and 3B participants were presented with negative images in random order and asked to rate their experience based on 11 engagement outcomes for each image. Free engagement duration is tracked on the initial presentation page, before participants move on to rating the outcomes. In Study 4, following a Choice-paradigm (*A*) and prior to presentation, participants rate each image (five paintings and five photos) on expected psychological impact (*D*) based on the description. Finally, they are presented with images they have chosen to see in the first phase, and free engagement duration is tracked.

art choice is significantly greater than 0.5 (i.e., half of the time). Participants opted for engaging with the artwork (M = 0.57, SD = 0.26) over the nonart image significantly higher than 50% of the time, $t(118) = 3.12$, $P = 0.001$, $d = 0.29$, 95% CI[0.10, 0.47], confirming our preregistered hypothesis.

In Study 4, we modeled engagement choice for a final time to examine what motives predict it along with context (art/nonart). Thus, we employed a within-subjects design where participants (N = 191) chose to engage or avoid negative images based on image descriptions in the art and nonart context. We fit a mixed-effects logistic regression on choice (engage/avoid) with participant and image description as random intercepts, including the context (art/nonart), motives, and their two-way interactions with context as fixed effects (Results on motives are presented in Section 3). Contrary to our preregistered hypothesis, the effect of context was not significant, $\chi^2(1) = 0.26$, $P = 0.61$; participants did not differ in their choice rates to view paintings (43.5% "Yes"; $Prob._{estimated} = 0.36$) vs. nonart images (41.3% "Yes"; $Prob._{estimated} = 0.34$). Thus, the effect of context on engagement choice was not replicated in Study 4. We attribute this finding to an adjustment in the design that we explain in the General Discussion (see also *Materials and Methods*).

As hypothesized, across studies, participants engaged with art images longer than nonart images. This was the case when participants were presented with images they chose to see (Study 1, Study 2, Study 4), and when participants were exposed to all images (Study 3A, Study 3B). In Study 1, we fit a linear mixed-effects model on engagement duration with participant and description as random intercepts, including context (art/nonart), valence (positive/negative), and their interaction as predictors. Engagement duration was log10 transformed to reduce skewness, reported descriptives are in seconds. Valence (b = −0.068, SE = 0.029, 95% CI[−0.124, −0.012], $t(18) = -2.37$, $P = 0.03$] and Context (b = −0.103, SE = 0.03, 95% CI[−0.163, −0.044], $t(200.4) = -3.40$, $P < 0.001$] were significant predictors of engagement duration, where participants engaged with negative images (M = 4.56, SE = 0.33) for longer than positive images (M = 3.90, SE = 0.32), and with artworks (M = 4.77, SE = 0.33) for longer than nonart images (M = 3.69, SE = 0.33). The interaction effect was not significant (b = 0.017, SE = 0.014, 95% CI[−0.011, 0.046], $t(2530.1) = 1.21$, $P = 0.23$]. In Study 2, we employed a paired sample t-test to compare the mean engagement duration for artworks to the mean engagement duration for the nonart images. Engagement duration was log10 transformed to reduce skewness. Participants engaged with artworks (in secs: M = 5.42, SD = 3.91) longer than they engaged with the nonart images (in secs: M = 4.49, SD = 2.85), $t(99) = 3.86$, $P < 0.001$, $d = 0.39$, 95% CI[0.18, 0.59]. Likewise, in Study 4, we fit a linear mixed-effects model on engagement duration with participant and description as random intercepts, and context (art/nonart) as a predictor. Engagement duration was log10 transformed to reduce skewness. Context was a significant predictor of engagement duration (b = 0.071, SE = 0.014, 95% CI[0.044, 0.098], $t(667.1) = 5.20$, $P < 0.001$) where participants engaged with artworks (in secs: M = 8.11, SE = 0.93) for longer than nonart images (in secs: M = 6.52, SE = 0.94).

In Studies 1, 2, and 4, engagement duration was only measured for chosen images; in Studies 3A and 3B, engagement duration was measured for all art and nonart images. In Study 3A, we fit a linear mixed-effects model on engagement duration with participant, image, and description as random intercepts, and context (art/nonart) as a within-subjects predictor. Engagement duration was log10 transformed to reduce skewness. Context was a significant predictor of engagement duration (b = −0.048, SE = 0.021, 95% CI[−0.088, −0.007], $t(9) = -2.31$, $P = 0.046$] where participants engaged with artworks (in secs: M = 9.11, SE = 0.61) for longer than nonart images (in secs: M = 8.59, SE = 0.61). Finally, in Study 3B, we fit a linear mixed-effects model on engagement duration with participant and description as random intercepts, and context (art/nonart) as a between-subjects predictor. Engagement duration was log10 transformed to reduce skewness. Context was a significant predictor of engagement duration (b = −0.135, SE = 0.026, 95% CI[−0.186, −0.084], $t(302) = -5.22$, $P < 0.001$] where participants engaged with artworks (in secs: M = 12.88, SE = 0.89) for longer than nonart images (in secs: M = 9.47, SE = 0.90).

Collectively, our results demonstrate that people prefer negative content as art over nonart. This is reflected both in choice behavior where people are more likely to engage with art images that depict negative content as compared to nonart images, and in engagement duration where people engage with art for longer than nonart images. For descriptives, see Table 1.

Table 1. Descriptive statistics of engagement probability and engagement duration in Studies 1 to 4

Study		Engagement probability (*SE*)	Engagement duration (*SE*)
Study 1			
Positive	Art	0.93 (0.02)	4.3 (0.38)
	Nonart	0.93 (0.02)	3.51 (0.38)
Negative	Art	0.73 (0.06)	5.25 (0.39)
	Nonart	0.47 (0.07)	3.87 (0.41)
Study 2			
Art		0.57 (0.02)	5.42 (0.39)
Nonart		0.42 (0.02)	4.49 (0.28)
Study 3A			
Art		—	9.11 (0.61)
Nonart		—	8.59 (0.61)
Study 3B			
Art		—	12.88 (0.89)
Nonart		—	9.47 (0.9)
Study 4			
Art		0.36 (0.06)	8.11 (0.93)
Nonart		0.34 (0.06)	6.52 (0.94)

Notes: Engagement probability for studies 1 and 4 presents probabilities estimated by mixed-effects logistic regression models. Engagement probability for Study 2 presents observed percentage of Art vs. Nonart choices. Engagement durations are measured and reported in seconds.

Art Experiences Evoke More Aesthetic Appreciation, Are Less Emotionally Costly, and Give the Viewer a Less Realistic Perspective. Next, we compared art and nonart engagement on 11 outcomes (see *Materials and Methods* for details) to uncover the possible differences in art and nonart experiences with negative content that could underlie individuals' preference for art across two studies (3A and 3B). We examined the outcomes of engaging with art and nonart depicting negative content in two studies, once with a within-subjects design (Study 3A, N = 249) and once with a between-subjects design (Study 3B, N = 304). In both studies, we fit linear mixed-effects models on each outcome, with participant, image, and description as random intercepts in the within-subject study, and with participant and description as random intercepts in the between-subject study, where context (art/nonart) is the predictor. We corrected for multiple tests by using an alpha of 0.005 (i.e., Bonferroni correction) in both studies. The results are organized based on three groups of outcomes where we first present confirmatory results based on our preregistered hypotheses

that were consistent across studies and significant against our conservative alpha-level. Second, we present results that tested for our preregistered hypotheses that were not supported. Last, we present results that were fully exploratory.

As hypothesized, across studies, participants reported greater aesthetic appreciation resulting from engagement with art images as compared to nonart (Study 3A: b = −9.96, *SE* = 1.31, 95% CI[−12.5, −7.40], $t(9) = -7.61$, $P < 0.001$; Study 3B: b = −12.7, *SE* = 2.31, 95% CI[−17.2, −8.19], $t(302) = -5.51$, $P < 0.001$). Furthermore, art engagement was less emotionally costly (Study 3A: emotional cost was not included; Study 3B: b = 6.78, *SE* = 2.34, 95% CI[2.20, 11.4], $t(302) = 2.90$, $P = 0.004$), and offered less of a realistic perspective (Study 3A: b = 22.4, *SE* = 2.93, 95% CI[16.6, 28.1], $t(9) = 7.63$, $P < 0.001$; Study 3B: b = 7.95, *SE* = 2.16, 95% CI[3.73, 12.2], $t(302) = 3.69$, $P < 0.001$]. These confirmatory results supported our preregistered hypotheses across studies. For descriptives, see Table 2.

Contrary to our preregistered hypotheses, negative content in the art and nonart context did not differ in rated thought provocativeness (Study 3A: b = 5.94, *SE* = 3.23, 95% CI[−0.39, 12.3], $t(9) = 1.84$, $P = 0.099$; Study 3B: b = 4.56, *SE* = 2.11, 95% CI[0.43, 8.70], $t(302) = 2.16$, $P = 0.031$] after correcting for multiple testing ($alpha_{corrected} = 0.005$). Art and nonart engagement gave participants an original perspective (Study 3A: b = 2.30, *SE* = 1.84, 95% CI[−1.31, 5.90], $t(9) = 1.25$, $P = 0.24$; Study 3B: b = −1.16, *SE* = 2.35, 95% CI[−5.76, 3.45], $t(302) = -0.49$, $P = 0.623$] and moved the viewer to a similar extent [Study 3A: b = 6.14, *SE* = 3.39, 95% CI[−0.51, 12.8], $t(9) = 1.81$, $P = 0.1$; Study 3B: b = 2.18, *SE* = 2.24, 95% CI[−2.22, 6.57], $t(302) = 0.97$, $P = 0.332$]. Results on helping participants prepare for a similar situation were mixed. In Study 3A, in line with our preregistered hypotheses, participants reported that nonart images helped them prepare for a similar situation more than the artworks (b = 3.73, *SE* = 0.94, 95% CI[1.90, 5.57], $t(9) = 3.98$, $P = 0.003$]. In Study 3B, however, the difference between artworks and nonart images was not significant (b = 2.16, *SE* = 2.10, 95% CI[−1.95, 6.28], $t(302) = 1.03$, $P = 0.30$). In all, in contrast to our preregistered hypotheses, our results suggest that there were no robust differences between art and nonart engagement with regard to thought provocativeness, original perspective, being moved, or helping the viewer prepare for a similar situation.

We conducted exploratory analyses on the four remaining outcomes as these were not associated with preregistered hypotheses (Table 2). Results showed that viewing art and nonart images evoked compassion (Study 3A, b = 7.99, *SE* = 3.15, 95% CI[1.80, 14.2], $t(9) = 2.53$, $P = 0.032$; Study 3B b = 2.89, *SE* = 2.09, 95% CI[−1.21,7], $t(302) = 1.38$, $P = 0.168$] to a similar extent after correcting for multiple testing. Across the two studies, nonart images prompted stronger moral reflection than art images; however, neither result was robust against our stringent correction for multiple comparisons (Study 3A, b = 5.93, *SE* = 1.91, 95% CI[2.20, 9.67], $t(9) = 3.11$, $P = 0.012$; Study 3B b = 6.11, *SE* = 2.53, 95% CI[1.15, 11.1], $t(302) = 2.41$, $P = 0.016$). Results on helping one understand the situation were mixed across the two studies (Study 3A, b = 7.74, *SE* = 1.91, 95% CI[3.99, 11.5], $t(9) = 4.04$, $P = 0.003$; Study 3B b = 1.14, *SE* = 2.42, 95% CI[−3.61, 5.90], $t(302) = 0.47$, $P = 0.64$). Finally, results on feelings of distress yielded a similar pattern as the preregistered finding for emotional cost. Art was associated with less distress than nonart in Study 3A, b = 9.80, *SE* = 3.30, 95% CI[3.34, 16.3], $t(9) = 2.97$,

Table 2. Descriptive statistics of Studies 3A and 3B comparing engagement outcomes across art and control conditions

Outcome	Result	Study 3A		Study 3B	
		Art	Control	Art	Control
		M (*SE*) 95% CI	*M* (*SE*) 95% CI	*M* (*SE*) 95% CI	*M* (*SE*) 95% CI
Confirmatory analyses					
Aesthetic appreciation	Art > Control*	24.1 (1.5) [21.1, 27.1]	14.2 (1.5) [11.2, 17.1]	40.8 (2.48) [35.7, 45.9]	28.1 (2.49) [23, 33.2]
Emotional cost[†]	Art < Control*	–	–	39.9 (4.5) [30.1, 49.7]	46.7 (4.51) [36.8, 56.5]
Realistic perspective	Art < Control*	33.4 (2.93) [27.4, 39.4]	55.8 (2.93) [49.7, 61.8]	43.8 (3.27) [36.8, 50.8]	51.7 (3.28) [44.7, 58.8]
Thought-provocativeness	Art = Control	49.3 (4.22) [40.4, 58.3]	55.3 (4.22) [46.3, 64.3]	53.5 (4.53) [43.6, 63.5]	58.1 (4.54) [48.1, 68.1]
Original perspective	Art = Control	38.2 (2.58) [32.9, 43.5]	40.5 (2.58) [35.2, 45.8]	43.1 (2.76) [37.3, 48.8]	41.9 (2.77) [36.1, 47.7]
Feeling moved	Art = Control	39.4 (4.86) [29, 49.9]	45.5 (4.86) [35.1, 56]	43.3 (5.17) [32, 54.7]	45.5 (5.17) [34.1, 56.9]
Helped prepare	Art = Control	16.9 (1.96) [12.9, 20.9]	20.6 (1.96) [16.6, 26.6]	20.3 (2.27) [15.6, 25]	22.5 (2.28) [17.8, 27.2]
Exploratory analyses					
Helped understand	Mixed	33.5 (2.84) [27.6, 39.5]	41.3 (2.84) [35.4, 47.2]	39.9 (3.22) [33.1, 46.7]	41.1 (3.23) [34.3, 47.9]
Feeling compassion	Art = Control	43.9 (5.35) [32.3, 55.6]	51.9 (5.35) [40.3, 63.6]	49.1 (5.84) [36.1, 62]	51.9 (5.85) [39, 64.9]
Feeling distress	Mixed	44.4 (4.26) [35.4, 53.5]	54.2 (4.26) [45.2, 63.3]	43.2 (4.5) [33.4, 53]	51.9 (4.51) [42.1, 61.7]
Moral reflection	Art = Control	33.9 (3.33) [26.8, 40.9]	39.8 (3.33) [32.8, 46.9]	35.2 (3.7) [27.3, 43.1]	41.4 (3.72) [33.4, 49.3]

Notes: Confirmatory analyses test preregistered hypotheses. An asterisk (*) indicates that the results support the preregistered hypotheses. Exploratory analyses test the effect of context (art vs. control) on engagement outcomes without preregistered hypotheses.
[†]This outcome was not measured in Study 3A.

$P = 0.016$ and Study 3B, b = 8.68, $SE = 2.40$, 95% CI[3.97, 13.4], $t(302) = 3.61$, $P < 0.001$, however, the former results did not pass our stringent correction for multiple comparisons.

Our results unambiguously support that art and nonart experiences with similar negative content differ in the aesthetic appreciation they evoke, and the realistic perspective they offer to the viewer. As such, aesthetic appreciation, a (diminished) realistic perspective and lower emotional cost of engagement stand as the ingredients of art experiences that make them distinct from nonart.

Engagement Behavior Was Driven by Original Perspective, Thought Provocativeness, Aesthetic Appreciation, and Emotional Cost. In Study 4, we compared motives for engaging with negative content in art and nonart media to understand predictors of engagement decisions and potential differences therein across media. We examined eight motives that mirror the outcomes tested in Study 3A and B. We fit a mixed-effects logistic regression on choice (engage/avoid) with participant and image description as random intercepts, and Context (art/nonart), each of the eight motives and their two-way interactions with Context as predictors.

Out of the eight motives we tested, four were significant predictors of engagement behavior, regardless of Context (art/nonart). Supporting our preregistered hypothesis, participants were more likely to engage with negative content if they expected an image to be thought-provoking ($\chi^2(1) = 4.57$, b = 0.29, $SE = 0.13$, exp(B) = 1.33, 95% CI[1.02, 1.73], $z = 2.14$, $P = 0.032$). Although we had preregistered interaction effects on aesthetic appreciation and original perspective, expecting these motives to be stronger predictors of art engagement, we found significant main effects where participants were more likely to engage if they expected an image to evoke aesthetic appreciation ($\chi^2(1) = 57.44$, b = 0.87, $SE = 0.11$, exp(B) = 2.38, 95% CI[1.90, 2.98], $z = 7.58$, $P < 0.001$), and give them an original perspective ($\chi^2(1) = 5.77$, b = 0.31, $SE = 0.13$, exp(B) = 1.37, CI[1.06, 1.76], $z = 2.40$, $P = 0.016$) both for art and nonart. Emotional cost was a negative predictor of engagement ($\chi^2(1) = 85.24$, b = −1.21, $SE = 0.13$, exp(B) = 0.30, CI[0.23, 0.39], $z = -9.23$, $P < 0.001$). Crucially, and confirming our preregistered hypothesis, this effect was stronger for nonart images (Context × Emotional Cost: $\chi^2(1) = 5.84$, b = 0.51, $SE = 0.21$, exp(B) = 1.67, CI[1.10, 2.53], $z = 2.42$, $P = 0.016$] such that expectations of an emotionally costly engagement predicted avoidance more strongly in the nonart context (b = −1.46, $SE = 0.18$, exp(B) = 0.23, 95% CI[0.16, 0.28], $z = -8.28$, $P < 0.001$) than the art context (b = −0.95, $SE = 0.16$, exp(B) = 0.39, 95% CI[0.28, 0.53], $z = -5.95$, $P < 0.001$). None of the remaining motives, nor their interactions with Context significantly predicted engagement behavior. A full list of motives is presented in *Materials and Methods*; extended results are presented in *SI Appendix*, Table S3.

Motives for approaching negative content were shared across art and nonart images; participants were more likely to engage with images they thought would be thought-provoking, evoke aesthetic appreciation, and offer an original perspective—attributes often linked to art experiences. Emotional cost predicted avoidance, even more so for nonart images. Overall, these findings complement those regarding engagement outcomes in explaining the preference for the arts in engaging with negative content.

Discussion

We investigated whether art promotes exploration of negative content. To this end, we quantified viewers' preference for art using behavioral measures and experimentally compared it to the exploration of matched nonart content. Our findings revealed a marked preference for the arts when engaging with negative content. First, participants were more likely to choose to view artworks that depicted moral violations (i.e., harm; ref. 22) as compared to nonart photos, both when making yes/no choices for art and nonart (Study 1), and when pitting art and nonart against each other (Study 2). Critically, Study 1 demonstrated that this effect was specific to negative content; participants did not choose art depictions of moral virtues (i.e., care; ref. 22) more often than nonart representations. Second, across five studies (total $N = 1{,}063$), participants engaged with artworks with negative content for longer durations as compared to nonart images with negative content. Participants spent more time with the artworks as compared to the control images both when they were presented with their choices (Studies 1, 2, and 4) and when they were presented with all of the images in the stimulus set (Studies 3A and 3B). To our knowledge, this study is among the first to quantify and compare viewers' preference for art and nonart experimentally via behavioral indicators (i.e., choice and duration of engagement). While it demonstrates individuals' preference for the arts when engaging with negative content, it is important to highlight that our results are based on multiple preregistered studies.

This preference for the arts was explained by favorable engagement outcomes linked to art experiences as compared to engagement with matched nonart content, which we tested across two preregistered studies. Our results give robust empirical support tying enhanced aesthetic appreciation, a diminished realistic perspective, and lesser emotional cost to art experiences. This is in line with previous theorizing in the field, specifically, the Distancing-Embracing model of negative emotions in art reception by Menninghaus and associates (8). Art, as an abstraction of reality, offers distance from the negative depiction, contributing to reduced cost of engagement while promoting (positive) aesthetic experiences. While previous studies have compared art and nonart experiences based on emotional responses and aesthetic judgments (e.g., refs. 23–28), inspiring the design and hypotheses of our Studies 3A and 3B, we have expanded the scope of experiential outcomes examined by focusing on both those related to art engagement and morbid curiosity (e.g., ref. 2).

One premise of the Distancing-Embracing model that our data cannot speak to is the potential for intensified emotional experiences brought about by the interplay of positive and negative emotions during art engagement. While the model suggests that an art context does not diminish the strength of negative emotions evoked (8), supported by several framing studies (24, 25), our exploratory findings suggest a decrease in distress, along with diminished emotional cost reported when engaging with the same moral violation via artworks. This is more compatible with the idea that the art context exerts regulatory effects on negative emotions, supported by another series of framing studies (29, 30). In all, our results align with previous studies: The art context is instrumental in eliciting (more) positive responses to negative stimuli (23–25, 30).

Further, we examined motives to engage with art and nonart that depicted negative content to understand what drives engagement choices. We found that individuals were drawn to content that they anticipated to be thought-provoking, evoke aesthetic appreciation, and provide an original perspective. Participants avoided images that they anticipated would be emotionally costly to engage with, especially in the nonart medium. Our findings connect to the literature on morbid curiosity, proposing that people are driven to engage with unpleasant content in exchange for informational, emotional, and social value (ref. 2, see also ref. 21), and echo the idea of a cost–benefit analysis shaping engagement.

In the present work, participants were motivated to engage with original, thought-provoking information and sought out aesthetic emotions, while juggling the emotional toll of the negative content. Notably, we found that the anticipated emotional cost of engagement plays less into viewers' decision to engage with negative artworks compared to their nonart equivalents. This aligns with the premise of the *aesthetic attitude*, where individuals approach art objects with diminished concern for immediate, practical implications, opening up space for aesthetic appreciation. Additionally, while most drivers of engagement identified in our results are not categorically unique to the arts, these attributes—being thought-provoking, evoking aesthetic appreciation, and offering an original perspective—align with common beliefs about art experiences (e.g., ref. 31). Taken together, our findings on engagement outcomes and motives illuminate the preference for arts when engaging with the negative as demonstrated by our behavioral findings. Further, they add to the literature aimed at unraveling the mystery of why humans opt to engage with unpleasant information on a daily basis (e.g., refs. 19, 32, and 33).

Our results resonate with broader theories of art experiences, extending beyond the Distancing-Embracing model (8) focused on negative art. For instance, our findings align with Leder and colleagues' (34) multistage model which describes bottom–up and top–down processes that shape aesthetic experience. By showcasing different motives (e.g., anticipated thought-provocativeness and original perspective) and outcomes (e.g., experienced emotional cost and distance) that shape art and nonart experiences, we provide empirical evidence on the interplay between bottom–up and top–down processes as described by Leder and colleagues' (ref. 34; e.g., cognitive mastering, aesthetic evaluation). This interplay shapes engagement preferences, driving people's inclination toward art when engaging with negative content in our study. Similarly, our results support the "Stopping for Knowledge" hypothesis (35), demonstrating art's ability to interrupt habits (e.g., avoidance of negative content), capture attention, and motivate exploration—evidenced by increased choice to engage and prolonged viewing duration. While our empirical results complement this account, we diverge in our focus on negative content which led us to explore beyond *beauty*, the primary driver in the Stopping for Knowledge hypothesis. Nevertheless, the drivers we uncovered promoting engagement with negative content in the arts (e.g., anticipated thought-provocativeness) echo their emphasis on epistemic motivation—the pursuit of knowledge and understanding. Our findings also resonate with Gallese's (36) liberated embodied simulation theory, which posits that art activates embodied neural responses (e.g., refs. 37 and 38), allowing viewers to internally simulate the emotions and actions depicted while remaining unrestrained by physical concerns. Although we did not directly test these neural mechanisms, they offer a plausible explanation for the reduced emotional costs associated with art experiences when engaging with negative content, thereby driving engagement. Specifically, this engagement is liberated from real-world consequences, promoting psychological distance and emotion regulation. Consequently, art provides a safe space for reflection, enabling viewers to experience negative content in an immersive way. Ultimately, the current work provides empirical evidence that aligns with these broad and influential theories of aesthetic experience in the context of negative art. We also extend their implications by demonstrating, through behavioral measures and the use of real artworks matched with nonart control images, how the processes these theories describe promote engagement.

Importantly, the failed replication of the effect on engagement choice in Study 4 demands explanation. We interpret this null effect of context on engagement through a design adjustment: Unlike the previous two studies (Studies 1 and 2), participants were not presented with images that they chose to see before moving to the next decision. In other words, participants did not experience art (nor nonart) within their cycle of decision-making, such that their art experience was not consequential for their subsequent decision. In the first two studies, by contrast, participants were immediately presented with the images they chose to see, reinforcing their subsequent choice with the experience of art and nonart. We believe that an exploratory finding may illuminate this null result and connect this finding to the literature on art experiences and predictive processing (20). In Study 4, we asked participants whether the image was more or less interesting than they had anticipated when finally presented with their viewing choices. We found that participants were surprised by how interesting the art images were, while nonart images were consistently rated "as interesting as I expected" (*SI Appendix*, Violation of Expectations in Study 4). In other words, while nonart images fulfilled participants' expectations, art images posed a positive violation of expectations. Research on predictive processing (e.g., refs. 39 and 40) suggests that humans are drawn to environments with certain levels of prediction error (i.e., surprise) because these hold novel information that can help us develop more refined representations of the world (41). As such, if our participants had experienced these prediction errors with art images within their decision-making cycle, these may have reinforced subsequent decisions for art versus nonart. This explanation is consistent with the idea of the aesthetic valve, in which aesthetic appreciation and the rewarding feedback it elicits motivates individuals to explore uncertainty (i.e., choose engagement) through associating positive feedback with the update of predictive representations (20).

It is worth noting that all studies reported here were conducted online, a platform that offers both advantages and disadvantages (for a discussion ref. 42). Our design capitalized on two key aspects. First, our paradigm mirrors everyday digital interactions with images by using art and nonart images sourced online. Whether it is browsing news based on titles or browsing art online, our approach aimed to replicate these engagement experiences. Second, although exploring other natural settings, like museums, is intriguing, our online design granted high experimental control. By carefully curating the art and nonart media through matched images, we present here a conservative test of the effect of art context on engagement with negative content. Our results thus lay a solid foundation for future research to explore the generalizability of this effect across other art venues, as well as other art forms (e.g., literary arts, performing arts). Another promising venue for future research would be investigating whether the engagement facilitated by art context influences attitudes and behaviors (e.g., prosocial behavior).

In all, our investigation introduces substantial advancements to the literature by addressing the untested yet widely theorized idea that art uniquely fosters engagement with negative content by transforming its experience. We demonstrated this effect using a methodology that leveraged voluntary engagement behavior and incorporated veridical artworks and matched nonart controls in a design that mirrors real-life information-seeking. To explain the mechanisms underlying art's power to shape exploratory behavior toward negative content, we extended prior research on experiential outcomes by examining factors beyond the commonly tested emotional and aesthetic responses and investigated which motives predicted engagement choices—a motivational approach not previously applied to art engagement.

As such, unlike existing studies, we connect art's impact to real-world information-seeking behaviors. Our results suggest that art stands as a powerful tool for communicating negative

information, that is otherwise costly and unpleasant to engage with (for an in-depth discussion; refs. 43 and 44). Getting people to engage with social injustices, environmental disasters, global crises, and suffering not only helps them keep informed about current issues, but it is also crucial for forming opinions, maintaining a sense of connection with our community and the world, and taking action to alleviate the pain incurred by moral violations. While these topics often dominate public discourse (e.g., discussions, demonstrations, media), it may feel overwhelming to engage with images of war, crisis, or disaster. Our findings provide actionable insights across disciplines such as aesthetics, media studies, cognitive and behavioral sciences, as well as among artists and cultural workers, journalists, and activists: Art may serve as a gateway for staying engaged, and potentially facilitate knowledge, meaningful dialog, and action.

Materials and Methods

Stimuli. Stimuli consisted of 10 painting-photo pairs that depicted moral violations, each couple sharing a description presented along with the image. Descriptions presented included "A young boy is forced to work in a factory," "Guerrilla soldiers attack civilians in a village," "Two men are locked in a fist fight," and "Police violently restrain a woman at a gathering," corresponding to the negative content depicted. Additionally, in Study 1, 10 painting-photo pairs that depicted morally positive behavior were used for positive trials, totaling 20 pairs. Positive descriptions included "A family enjoy a meal together," "A younger woman takes care of an older one," and "A community plants trees together." See *SI Appendix*, Table S2 for the full list of descriptions. All of the images were collected online, through searching for painting and photo pairs that depicted a positive or a negative moral act concerning harm/care (see Moral Foundations Theory; ref. 22), sharing the content depicted, and being visually similar. Paintings included works from Fernando Botero ("Massacre in Colombia," 2000) Kent Monkman ("They are Warriors", 2017), and Mary Cassatt ("Mother Feeding Child", 1898). The final set of art images and nonart images were selected from 46 pairs that were initially collected and pilot-tested on moral content and artistry. A detailed description of the pilot study is presented in *SI Appendix*, *Pilot Study*. The final set of paintings and photos that was included in the study fulfilled two main criteria: 1) the painting was rated as significantly more artistic than the photo within each pair, and 2) the painting and photo sets were statistically matched on moral content (i.e., a nonsignificant *t*-test result on the (im)morality of the content depicted in the paintings vs. in the photos). Across studies (except Study 3A), the paintings were introduced and presented to the participants as "a painting selected to be displayed in an art gallery," while the photos were presented as "a photo selected to illustrate a news article." For more information about the stimuli, please contact the corresponding author.

Participants. Participants were recruited on Prolific with the following inclusion criteria: English as first language, approval rate of at least 90% on Prolific, and not having participated in one of the previous studies in the project. Participants were excluded from the analyses based on attention checks, as detailed in the preregistrations on OSF for each study (https://osf.io/9u86w/registrations). Sample size and the exclusion criteria were defined prior to data collection and testing. Accordingly, a total of 200 participants were included in Study 1 (100 females, age: $M = 43.5$, $SD = 14$), 119 in Study 2 (59 females, age: $M = 46.3$, $SD = 14.5$), 249 in Study 3A (125 females, age: $M = 44.9$, $SD = 13.4$), 304 in Study 3B (152 females, age: $M = 42.3$, $SD = 12.8$), and 191 in Study 4 (96 females, age: $M = 43.6$, $SD = 13.1$). Analyses of each study were performed once the whole dataset of the study had been collected and preregistered exclusions had taken place. No participants were excluded in Study 1 as no one met the preregistered exclusion criteria. In Study 2, out of the preregistered sample size of 122, three participants were excluded: two for completing the study in durations exceeding three SDs above the mean and one for failing an attention check. Although our preregistration specified exclusion only for failing both attention checks, this participant failed a check embedded within the engagement task, indicating random responses in the art versus nonart choices, which directly related to the primary research question. Study 3A initially had 251 participants, but data inspection revealed a duplicate Prolific ID, indicating two entries from one account. Both entries were excluded, resulting in a final sample size of 249. There were no preregistered listwise exclusion criteria for Study 3A, and no additional exclusions were made. Study 3B had no preregistered listwise exclusion criteria, and none occurred. In Study 4, our preregistered criterion specified excluding participants who failed an attention check embedded in the motive-rating task, which eliminated thirteen participants that failed to comply with instructions, resulting in a final sample size of 191. All procedures were approved by the local ethics committee of the University of Amsterdam (UvA). Participants performed the studies on Qualtrics after they gave informed consent. Prior to giving informed consent, participants were informed that the images they may view in the studies could be experienced as negative. They were paid for their participation according to Prolific regulations (min £6/h).

Tasks and Procedure.

Study 1. Participants were randomly assigned to the art (paintings) vs. control (photos) conditions. In the art condition, they were informed that they "…will be presented with 20 descriptions, each describing a painting selected to be displayed in an art gallery." In the control condition, they were informed that they "…will be presented with 20 descriptions, each describing a photo selected to illustrate a news article." They were presented with 20 descriptions (10 positive, 10 negative) one by one in random order, and following each description, they were asked "Do you want to see the painting [photo]?" If they chose "yes" they were presented with the image, if they chose "no", they were presented with the next description. The duration participants stayed on the presentation page was tracked as the operationalization of engagement duration. Finally, participants answered questions on art interest and trait curiosity. A full list of items is available in *SI Appendix*, Table S1 (Protocol of Studies 1 to 4).

Study 2. Participants were instructed: "In this study, you will receive 10 descriptions, each describing a painting and a photo. After reading each description, you will decide whether to view the painting or the photo. The paintings are a selection of artworks displayed in an art gallery. The photos have been collected from the news media, each illustrating a news article…" Participants were then presented with 10 image descriptions, one by one, in random order (negative descriptions from Study 1). After being presented with each description, they were asked "Which image do you want to see?" choosing between "Photo" and "Painting." Positions of the choices "Painting" and "Photo" were switched randomly throughout the task. They were then presented with the image they chose to see. The duration participants stayed on the presentation page was tracked as the operationalization of engagement duration. Finally, participants answered questions on art interest and trait curiosity.

Study 3A. Participants were informed that they "…will be presented with 10 text descriptions, each represented by 2 images." Then, they were presented with each of the 10 descriptions twice, once with the matching painting and once with the photo, in random order (20 images in total). After seeing each image, they rated statements on how they experienced it. These were emotional responses on 1) distress, 2) being moved and 3) compassion; ratings on how 4) thought-provoking and 5) aesthetically pleasing the viewing experience was, and ratings on whether it 6) gave them an original perspective, 7) gave them a realistic perspective, 8) made them reflect on their moral values, 9) helped them understand the situation, and 10) helped them prepare for a similar situation. All statements were rated on a scale from 0 ("not at all") to 100 ("extremely"). Verbatim statements used are presented in *SI Appendix*, Table S1. Participants had to click "Next" on the initial presentation page to proceed to the ratings page. The duration participants stayed on the presentation page was tracked as the operationalization of engagement duration. Finally, participants answered questions on art interest and trait curiosity.

Study 3B. Participants were randomly assigned to art (paintings) vs. control (photos). In the art condition, they were informed that they "…will be presented with 10 paintings, each accompanied by a short description. These paintings are a selection of artworks displayed in an art gallery." In the control condition, they were informed that they "…will be presented with 10 photos, each accompanied by a short description. These photos have been collected from the news media, each illustrating a news article." They were then presented with 10 images, one by one, in random order. After seeing each image, they rated the same statements on how they experienced the image as in Study 3B, with an additional statement on the emotional cost of engagement. Verbatim statements used are presented in

SI Appendix, Table S1. Participants had to click "Next" on the initial presentation page to proceed to the ratings page. The duration participants stayed on the presentation page was tracked as the operationalization of engagement duration. Finally, participants answered questions on art interest and trait curiosity.

Study 4. Study 4 involved three phases. First, in the choice phase, participants were presented with the 10 negative image descriptions, one by one, in random order. They saw each description either coupled with the painting or the photo match, based on random assignment to one of the two stimuli sets. This way, each participant was presented with five painting and five photo descriptions. As in Study 1, participants were asked: "Do you want to see the painting [photo]?" following each description. After they made their choice, either "Yes" or "No," they were presented with the next image description. Crucially, here participants were not presented with an image immediately after the viewing decision. All choices were made prior to seeing any paintings or photos. Second, in the motives phase, participants were presented with the same image descriptions and asked to rate the predicted impact of viewing each image on eight motivational items (e.g., "This painting [photo] will give me a realistic perspective"). Rated motives included expectations of 1) being moved, 2) emotional cost, ratings on 3) aesthetic appreciation, how 4) thought-provoking the viewing experience will be, and ratings on whether it will 5) give one an original perspective, 6) give the viewer a realistic perspective, 7) make one reflect on their moral values, 8) help one prepare for a similar situation. All statements were rated on a scale from 0 ("not at all") to 100 ("extremely"). A full list of motives statements is presented in *SI Appendix*, Table S1. Then, in the presentation phase, participants were presented with the images they chose to see in the first phase. The duration participants stayed on the presentation page was tracked as the operationalization of engagement duration. Following the presentation of each selected image, participants were asked "Is the image more or less interesting than you expected?" rated on a scale from 0 ("less interesting") to 100 ("more interesting"), with 50 labeled as "as I expected." Finally, participants answered questions on art interest and trait curiosity.

Data Analysis. All reported analyses were conducted using Jamovi (45, 46), utilizing the GAMLj module (47). This module implements multiple R packages for fitting linear mixed and generalized mixed models. Comprehensive documentation and technical specifications are available at https://gamlj.github.io/.

Data, Materials, and Software Availability. All study data have been deposited in Open Science Framework (https://osf.io/9u86w/) (48).

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1. S. Oosterwijk, Choosing the negative: A behavioral demonstration of morbid curiosity. *PLoS One* **12**, e0178399 (2017).
2. E. Niehoff, S. Oosterwijk, To know, to feel, to share? Exploring the motives that drive curiosity for negative content. *Curr. Opin. Behav. Sci.* **35**, 56–61 (2020).
3. C. Unkelbach, A. Koch, H. Alves, The evaluative information ecology: On the frequency and diversity of "good" and "bad". *Eur. Rev. Soc. Psychol.* **30**, 216–270 (2019).
4. M. Miller, M. M. Anderson, F. Schoeller, J. Kiverstein, "Getting a kick out of film" in *Worlding the Brain* (BRILL, 2023), pp. 49–62.
5. J. Litman, Curiosity and the pleasures of learning: Wanting and liking new information. *Cogn. Emot.* **19**, 793–814 (2005).
6. S. A. Turner, P. J. Silvia, Must interesting things be pleasant? A test of competing appraisal structures. *Emotion* **6**, 670–674 (2006).
7. L. Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford University Press, ed. 1, 1993).
8. W. Menninghaus *et al.*, The Distancing-Embracing model of the enjoyment of negative emotions in art reception. *Behav. Brain Sci.* **40**, e347 (2017).
9. T. J. Scheff, *Catharsis in Healing, Ritual, and Drama* (University of California Press, 1979).
10. M. D. Litt, Self-efficacy and perceived control: Cognitive mediators of pain tolerance. *J. Pers. Soc. Psychol.* **54**, 149–160 (1988).
11. S. Thuillard, E. S. Dan-Glauser, The regulatory effect of choice in Situation Selection reduces experiential, exocrine and respiratory arousal for negative emotional stimulations. *Sci. Rep.* **7**, 12626 (2017).
12. P. J. Silvia, T. B. Kashdan, Interesting things and curious people: Exploration and engagement as transient states and enduring strengths. *Soc. Personal Psychol. Compass* **3**, 785–797 (2009).
13. J. C. Veilleux, A theory of momentary distress tolerance: Toward understanding contextually situated choices to engage with or avoid distress. *Clin. Psychol. Sci.* **11**, 357–380 (2023).
14. N. Carroll, *Philosophy of Art: A Contemporary Introduction* (Routledge, ed. 1, 1999).
15. E. Gombrich, *Art and Illusion* (Pantheon Books, 1960).
16. E. Bullough, Psychical distance' as a factor in art and an aesthetic principle. *Br. J. Psychol.* **5**, 87–118 (1912).
17. Y. Trope, N. Liberman, Construal-level theory of psychological distance. *Psychol. Rev.* **117**, 440–463 (2010).
18. A. Bartsch, M.-L. Mares, Making sense of violence: Perceived meaningfulness as a predictor of audience interest in violent media content. *J. Commun.* **64**, 956–976 (2014).
19. A. Vivanco Carlevari, S. Oosterwijk, G. A. van Kleef, Why do people engage with the suffering of strangers? Exploring epistemic, eudaimonic, social, and affective motives. *Cognit. Emot.*, in press.
20. P. Barbieri *et al.*, The aesthetic valve: How aesthetic appreciation may switch emotional states from anxiety to curiosity. *Philos. Trans. Royal Soc. B Biol. Sci.* **379**, 20220413 (2024).
21. E. Niehoff, M. Mittenbühler, S. Oosterwijk, To read or not to read? Motives for reading negative COVID-19 news. *Am. Psychologist* **79**, 254–267 (2024).
22. J. Graham *et al.*, "Moral foundations theory: The pragmatic validity of moral pluralism" in *Advances in Experimental Social Psychology*, P. Devine, A. Plant, Eds. (Elsevier, 2013), pp. 55–130.
23. G. Gerger, H. Leder, A. Kremer, Context effects on emotional and aesthetic evaluations of artworks and IAPS pictures. *Acta Psychol. (Amst)* **151**, 174–183 (2014).
24. V. Wagner, W. Menninghaus, J. Hanich, T. Jacobsen, Art schema effects on affective experience: The case of disgusting images. *Psychol. Aesthet. Creat. Arts* **8**, 120–129 (2014).
25. V. Wagner *et al.*, Anger Framed: A field study on emotion, pleasure, and art. *Psychol. Aesthet. Creat. Arts* **10**, 134–146 (2016).
26. M. Pelowski, G. Gerger, Y. Chetouani, P. S. Markey, H. Leder, But is it really art? The classification of images as "Art"/"Not Art" and correlation with appraisal and viewer interpersonal differences. *Front. Psychol.* **8**, 1729 (2017).
27. F. Papenmeier, G. Dagit, C. Wagner, S. Schwan, Is it art? Effects of framing images as art versus non-art on gaze behavior and aesthetic judgments. *Psychol. Aesthet. Creat. Arts* **18**, 642–653 (2022), 10.1037/aca0000466.
28. K. Graywill, R. Chamberlain, The visual language of pain: The role of rendering style and pain type in aesthetic and empathetic appraisals of painful images. *Psychol. Aesthet. Creat. Arts*, in press.
29. I. Mocaiber *et al.*, Fact or fiction? An event-related potential study of implicit emotion regulation. *Neurosci. Lett.* **476**, 84–88 (2010).
30. N. N. N. Van Dongen, J. W. Van Strien, K. Dijkstra, Implicit emotion regulation in the context of viewing artworks: ERP evidence in response to pleasant and unpleasant pictures. *Brain Cogn.* **107**, 48–54 (2016).
31. I. Schindler *et al.*, Measuring aesthetic emotions: A review of the literature and a new assessment tool. *PLoS One* **12**, e0178899 (2017).
32. C. Scrivner, M. M. Andersen, U. Schjødt, M. Clasen, The psychological benefits of scary play in three types of horror fans. *J. Media Psychol.* **35**, 87–98 (2023).
33. M. Miller, B. White, C. Scrivner, Surfing uncertainty with screams: Predictive processing, error dynamics and horror films. *Philos. Trans. Royal Soc. B: Biol. Sci.* **379**, 20220425 (2024).
34. H. Leder, B. Belke, A. Oeberst, D. Augustin, A model of aesthetic appreciation and aesthetic judgments. *Br. J. psychol.* **95**, 489–508 (2004).
35. P. Sarasso, M. Neppi-Modona, K. Sacco, I. Ronga, "Stopping for knowledge": The sense of beauty in the perception-action cycle. *Neurosci. Biobehav. Rev.* **118**, 723–738 (2020).
36. V. Gallese, Mirroring, a liberated embodied simulation and aesthetic experience. *Neuroscience* **2**, 661–670 (2001).
37. M. Ardizzi *et al.*, Beholders' sensorimotor engagement enhances aesthetic rating of pictorial facial expressions of pain. *Psychol. Res.* **84**, 370–379 (2020).
38. M. Ardizzi *et al.*, Visceromotor roots of aesthetic evaluation of pain in art: an fMRI study. *Soc. Cogn. Affect. Neurosci.* **16**, 1113–1122 (2021).
39. K. Friston, The free-energy principle: A unified brain theory? *Nat. Rev. Neurosci.* **11**, 127–138 (2010).
40. A. Clark, *Surfing Uncertainty: Prediction, Action, and the Embodied Mind* (Oxford University Press, 2015).
41. S. Van de Cruys, "Affective value in the predictive mind" in *Philosophy and Predictive Processing*, T. K. Metzinger, W. Wiese, Eds. (MIND Group, 2017).
42. J. K. Goodman, G. Paolacci, Crowdsourcing consumer research. *J. Consum. Res.* **44**, 196–210 (2017).
43. E. Stamkou, D. Keltner, Aesthetic revolution: The role of art in culture and social change. *SSRN Electron. J,* 15 August 2020. https://doi.org/10.2139/ssrn.3578575. Accessed 14 May 2024.
44. D. Keltner, E. Stamkou, Possible worlds theory: How the imagination transcends and recreates reality. *Annu. Rev. Psychol.* **76**, 32.1–32.30 (2024).
45. Jamovi, The jamovi project (Version 2.3, Computer Software, 2021). https://www.jamovi.org. Accessed 3 December 2023.
46. R Core Team, R: A Language and environment for statistical computing (2021). https://cran.r-project.org. Accessed 3 December 2023.
47. M. Gallucci, GAMLj: General analyses for linear models (2019). https://gamlj.github.io/. Accessed 3 December 2023.
48. Y. Ozbay, E. Stamkou, S. Oosterwijk, Glimmer in gloom: The arts promote exploration of negative content. *OSF*. https://osf.io/9u86w/. Deposited 10 July 2024.