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University of Amsterdam, Netherlands

*CORRESPONDENCE

Itay Goetz
✉ itay.goetz@uni-bamberg.de

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Art for art's sake? The influence of art framing and context on the evaluation of immoral behaviour

Itay Goetz^{1,2,3*}, Lara Bernhardt¹, Friederike Margareta Karg¹,
Alexander (Sasha) Pastukhov^{1,2,3} and Claus-Christian Carbon^{1,2,3}

¹Department of General Psychology and Methodology, University of Bamberg, Bamberg, Germany,

²Research Group EP/EG (Ergonomics, Psychological Aesthetics, Gestalt), Bamberg, Germany,

³Bamberg Graduate School of Affective and Cognitive Sciences (BaGrACS), Bamberg, Germany

Artists often challenge societal norms through their artworks; hence, red lines have notoriously been crossed throughout art history. This is particularly the case since the Renaissance, when artists were emancipated from craftspeople and began challenging beholders regarding visual habits, religious, and ethical norms. Because artworks possess a special status in our society, they are processed qualitatively differently from everyday life objects. Hence, they offer the opportunity for dialogue, disentangled from automatic evaluative heuristics and strict categories. We tested how labeling visual depictions of immoral acts as art vs. non-art affects the overall evaluation of such depictions. Furthermore, we explored the impact of presenting pictures in a physical art gallery on such evaluations. Participants ($N = 140$) were allocated into one of three viewing conditions: *art-gallery*, *art-online*, and *non-art-online*, where the same set of 20 pictures was presented. The pictures evoked similar adverse emotional reactions when shown as art and non-art, including in the gallery. Nevertheless, regarding beauty, interest and happiness rates, the pictures were evaluated higher when labeled art and even higher when presented in the gallery. Additionally, participants reported lower understanding rates and higher surprise rates for the art-labeled pictures, perhaps indicating that people were less likely to immediately apply standard heuristics and categorization routines when processing them. We conclude that art, especially when presented in typical art contexts, provides special conditions that invite beholders to challenge, adapt, and extend their habits. Art may offer a unique context for engaging with extreme or novel ideas, inviting reflection and even transformation.

KEYWORDS

art appreciation, ethics and aesthetics, museum effect, context, framing, art experience, disinterestedness, aesthetic distancing

Introduction

Immorality in art history—from pagan gods to tattooed pigs

Artists, like most people, are bound by the societal boundaries, norms, and moral values that define their times. However, unlike most people, throughout history, many prominent artists have regularly transgressed these values and norms, thus helping to ensure that they were reflected upon, discussed and even adjusted and expanded. During antiquity and the middle-ages, visual artists (painters, sculptors, and architects) were considered as craftspeople and so they mainly executed jobs assigned to them—they were not considered as an entity of particular societal value (Gombrich, 1995; Kristeller, 1951).

Artists, as we recognize them today, are considered as such since the Renaissance, when they came to possess a special status as an exceptional group of people who are admired and marveled at (Gombrich (1995) and Kristeller (1951)). Therefore, since this period, humankind has observed artists testing the boundaries of art and, consequently, of society.

However, while in the Classical and Modern periods, artists had often depicted but not engaged in immoral behavior *per se* for creating art, some Contemporary artists clearly act immorally [to the degree that we can define immoral behavior as causing unnecessary suffering to other beings (Landy and Goodwin, 2015)] for the sake of creating art. We explored whether art distorts moral evaluations, to the degree that immoral behavior that would otherwise be deemed unacceptable will be more acceptable when an artist engages in it.

A brief review of artworks that challenged moral norms should unquestionably include *The Last Judgment* in the Sistine Chapel (1536–1541) by Michelangelo [Buonarroti], which depicts Christ in a style reminiscent of a Pagan God, alongside 300 figures of nude men. Some saw the fresco as an abuse of history and a glorification of art at the expense of sacred truth and ordered the figures' genitals to be covered (Schlitt, 2005). The Modern period, being so revolutionary, saw countless similar fiascos. In the Early Contemporary period, Monica Sjoo exhibited her painting *God Giving Birth* in St Ives town hall, England. The painting depicts God as a black figure and the human creation as a process of human birth. Following the unveiling, the mayor ordered the removal of the painting and other paintings by Sjoo, claiming it was blasphemous, ugly, and obscene. Her paintings were censored during the 1970s and 1980s, but today *God Giving Birth* is considered and respected as an icon of feminist art (Feraro, 2013).

It seems that today, we have familiarized ourselves with such works, and, in retrospect, most people living in a considerably more open-minded and tolerant society will hardly identify with the conflicts and angry outbursts these artworks triggered in those times. Nevertheless, artists' quest to challenge social norms remains, and perhaps the openness of our current society renders this quest more questionable than ever. Two notable examples that resulted in a substantial and real threat to the artist's physical health are Yoko Ono's *Cut Piece* (1964) and Marina Abramovic's *Rhythm 0* (1974). In contrast to the artworks described above, these performances not only depict borderline themes; they also cause real harm to the artists themselves and even put them in danger.

Later Contemporary artists, such as Damien Hirst (born 1965) and Wim Delvoye (born 1965), pushed the boundaries even further, inflicting suffering on living beings that never consented to the subject of their art. In fact, it is their work that inspired the current study. Hirst's breakthrough piece is *One Thousand Years* (1990), in which a rotting cow's head is placed in a see-through tank. Maggots are placed inside the head, breed, and turn into flies that die as soon as they hit a bug zapper placed at the top of the tank. Altogether, it has been calculated that as of 2017, approximately 913,414 farm animals, sea creatures, birds, and insects lost their lives for the sake of creating Hirst's artistic oeuvre (<https://news.artnet.com/art-world/damien-whats-your-beef-916097>). Wim Delvoye has been tattooing dead pigs since the 1990s, using their skin as his canvas. In 1997, he began tattooing living pigs (mostly) with references from

Western iconography, such as Louis Vuitton monograms, Disney characters, and depictions of Jesus Christ on their skin, selling them either alive or their harvested skin upon their death.

The main difference between the aforementioned artworks by Michelangelo and Sjoo, and those by Hirst and Delvoye is that the former represent *ethical content*, while the latter two possess *ethical value*. Artworks with *ethical content* are understood as artworks that explore ethical themes or represent moral or immoral behavior (Clavel-Vazquez, 2018). Some examples are a film showing a theft or a murder scene, a painting depicting discriminatory content or a sculpture representing a biblical or mythological rape story. All such artworks depict immoral content, and some argue that they could indirectly influence individuals (see Carroll, 2000), however, due to their fictional status, they are not thought to possess ethical value—they do not have a direct inherent bearing on living beings (Clavel-Vazquez, 2018). By contrast, artworks with *ethical value* are works that not only represent morally charged behavior but inherently engage in such behavior (Clavel-Vazquez, 2018). Hirst and Delvoye's works fit in this category, as they cause apparent suffering for living creatures. Despite that, the art created by Hirst (Delvoye is more often questioned) is widely accepted, supported, and appreciated by the “big players” of the art world. His works using animals have been presented in the Tate Modern, the Metropolitan Museum of Art, the Gagosian galleries, Sotheby's, and other leading museums, galleries and auction houses around the world, and he is considered a superstar artist with an estimated net worth of \$300 million (<https://www.therichest.com/>).

It seems likely that artworks with ethical value become so prevalent and acceptable because art possesses a special status in our society. Benjamin (1936/2018) argued that, because until modernity art mostly operated in the service of religion and rituals, it became distinct from the realm of everyday life for the average person. As a result, artworks came to possess an *aura*, meaning that viewers appreciate them from some psychological distance, even if they are physically close to them. Marcuse (1979) referred to a similar phenomenon, which he termed *aesthetic sublimation*. According to this concept, art opens a new dimension of experience whereby typical values, norms, and needs can be questioned to the degree that “...even the representation of death and destruction invokes the need for hope—a need rooted in the new consciousness embodied in the work of art” (Marcuse, 1979, p. 7).

This special status of art means that it undoubtedly bears great potential for society. Smith (2014b) argued that art museums might “civilise” visitors by encouraging them to reflect on society and their lives. This potential of art is also evident in recent prestigious contemporary art events such as the 2022 Venice Biennale (with approximately 90% female artists in the main exhibition), Documenta 15 in Kassel in 2022 (curated by the Indonesian artist's collective Ruangrupa to convey the core values of collectivity, communal resource sharing, and equality) and the 2024 Venice Biennale (titled “Foreigners Everywhere” and in which hitherto less represented outsider artists such as queer, folk, and Indigenous artists, mostly from the Global South exhibited their work). However, a question that may be raised is whether some artists capitalize on the unique status of art to engage in otherwise unacceptable behavior, for questionable ends. Additionally, while such artworks are

evidently accepted by the artworld, an important question that remains open is the beholder's experience: are people more tolerant of real-world immoral behavior when it is conducted by an artist?

Cognitive mechanisms—Why may immoral behavior be tolerated in the context of art?

There are various reasons to believe and indeed expect that people would accept more immoral behavior in the context of art. We will cover the two reasons we see as most relevant here: (a) people may enter an aesthetic or art-specific mode during their interaction with art, and (b) people accept and even embrace more negative emotions in the context of art.

Within modern philosophical thought, the view that engaging with art involves entering a state of mind distinct from an everyday mode of processing was first systematically developed by Shaftesbury (1671–1713/1964). The most influential account of aesthetic-specific attention is attributed to Kant (1790/1951), as presented in his critique of aesthetic judgment (Beardsley, 1975). For a thorough historical analysis of these ideas, see Stolnitz (1961) and Rind (2002). For an analysis of the cognitive mechanisms of this concept, see Goetz and Carbon (2024).

Several lab-based studies have provided evidence for the influence of art context on aesthetic judgments and, thus, for the existence of an art-specific mode of processing. For example, studies exposed participants to the same artworks (Kirk et al., 2009) or artworks and non-art pictures (Cupchik et al., 2009) and recorded activation in different brain areas when the artworks were presented as art (e.g., as belonging to a gallery collection) compared to non-art (e.g., given as computer-generated). Studies recording scale data using similar designs have found that participants appreciate the aesthetic features of the same artworks or non-art pictures more highly when these are presented as art compared to non-art (Arai and Kawabata, 2016; Haertel and Carbon, 2014; Kirk et al., 2009; Van Dongen et al., 2016).

Furthermore, it has been shown that adopting an art mode of processing affects the processing of everyday objects by increasing their symbolic saliency (Iosifyan and Wolfe, 2024). We may speculate that this mode also leads beholders to consider the symbolism of immoral behavior more deeply and thus to accept artworks with immoral value. For example, beholders may reason that an artist abuses an animal in order to represent the suffering of other beings *symbolically* and thus tolerate the abuse of “only” one or a few animals for this greater goal. Lastly, watching art films (as opposed to Hollywood films) was shown to foster Theory of Mind (Castano, 2021). We may expect that the complexity of human (and non-human) relations depicted in artworks *qua artworks* encourages viewers to consider the behavior from otherwise neglected viewpoints (perhaps that of the perpetrator) and hence evaluate the behavior more favorably.

However, as these studies were conducted solely in laboratories, they cannot account for the influence of context on the experience

and evaluation of art (see Carbon, 2020). Art museums, with their unique atmosphere (Böhme, 1993), design and architecture, are often designed to facilitate visitors to enter such modes of experience (Giebelhausen, 2006). Art context is an essential factor, if not the primary catalyst for art-specific processing (Goetz and Carbon, 2024), and some have argued that the museum, not the art, is the main “star” of the visit (Smith, 2014a; Smith and Smith, 2001). Therefore, ecologically valid studies are needed to demonstrate the full and “true” effect of art (Carbon, 2023). Indeed, Briber et al. (2015) found that artworks were experienced more intensely and recalled better when seen in a museum compared to online. Muth et al. (2017) presented participants with short artistic films with elusive meaning, either in a gallery or the lab. Participants found the films less semantically unstable and more pleasing in the gallery context. It was assumed that participants were more likely to adopt an art-specific mode in an art-specific (i.e., gallery) context compared to a non-art (i.e., lab) context (Muth et al., 2017). Thus, the results suggest that such a processing mode may indeed exist, and that it renders people more likely to expect and enjoy cognitively challenging stimuli in the context of art, and to see the content depicted differently, altered, or from a different perspective, as soon as the works are perceived and interpreted as works of art (Arai and Kawabata, 2016; Wagner et al., 2014).

The second main reason to predict that people may accept more immoral behavior in the context of art is accumulating evidence that people accept and even enjoy more negative emotions in the context of art (Gerger et al., 2014; Wagner et al., 2016, 2014). This phenomenon is not mutually exclusive of the findings discussed above: if people naturally seek to avoid the feeling of negative emotions in everyday situations, the acceptance and even the embrace of these emotions within the context of art may hint that different processing styles take place in each situation.

Spence (2020) showed that aversive sensual stimuli are generally experienced less negatively in the context of art. Specific to the question of morality, aversive stimulations were shown to have a reduced influence on aesthetic judgments than on moral judgments (Rabb et al., 2016). Ozbay et al. (2025) reported behavioral differences, showing that participants were more likely to agree to view artworks depicting negative content than non-art photographs depicting the same content. No effect was found for art and photographs depicting positive content, suggesting that this is a negativity-specific bias (Ozbay et al., 2025). Wagner et al. (2014) exposed participants to pictures of typical disgust elicitors labeled either as art or non-art. Disgust and negative emotional rates did not differ between the groups, while participants who believed the pictures were artworks felt significantly higher positive emotions. These results suggest that negative responses to negative stimuli are not attenuated when the stimuli are seen as art, but that participants enjoy them more when approaching them as art (Wagner et al., 2014).

Concordant patterns of results have emerged from several studies addressing related questions. For instance, Wagner et al. (2016) involved participants in a similar anger-inducing situation in an art (i.e., theater performance) or everyday (i.e., job assessment interview) context. Upon rating the experience, participants in the art framing provided significantly lower anger rates, as

well as higher amusement, pleasure, enjoyment and interest rates compared to the assessment framing group. Nonetheless, physiological data pointed to similar feelings of anger in both conditions (Wagner et al., 2016). Correlational results even suggested that some participants in the art group enjoyed feeling negative emotions, while participants in the assessment group did not (Wagner et al., 2016). Gerger et al. (2014) asked participants to rate positive and negative pictures in art vs. non-art (e.g., press photography) framings. For the negative pictures, participants in both framings reacted with similar rates of negative emotions. At the same time, participants in the art framing rated the negative pictures as significantly more joyful and liked than participants in the non-art framing (Gerger et al., 2014). Thus, similar to Wagner et al. (2014, 2016) and Gerger et al. (2014) suggested that the experience of negative emotions is not weakened in an art context, but that felt negative emotions are evaluated differently in this context.

Lastly, Hanich et al. (2014) provided one explanation for the question of why people may enjoy negative emotions in the context of art. Hanich et al. (2014) showed participants short sad films and obtained ratings of sadness, as well as ratings indicative of participants' liking of the films and their feelings of being moved by them. The study revealed a positive correlation between sadness and liking, which was mediated by the feeling of being moved. Hence, Hanich et al. (2014) suggested that art viewers may enjoy feelings of sadness, as such feelings move them, and being moved is a feeling people enjoy. Wagner et al. (2014) proposed an additional mechanism—negative emotions may lead to higher arousal and intensity of experience and strengthen art's attentional effect and impact on beholders.

The distancing-embracing model of the enjoyment of negative emotions in art reception (Menninghaus et al., 2017) aims to explain the embracement of negative emotions in art drawings through two psychological mechanisms: distancing and embracing. The distancing mechanism accounts for the view that individuals adopt an art-specific mode (termed art schemata in the model) during their interaction with art. Once the distance is established (i.e., beholders feel safety and approach art impractically), the subsequent embracing factor enables beholders to enjoy their negative feelings by searching for meaning in the artwork, appreciating its aesthetic features, and so on (Menninghaus et al., 2017), as also shown in other domains of aesthetics such as music (Weth et al., 2015).

Within the context of the intersection between ethics and aesthetics, previous studies have found that both landscape photographs (Duer et al., 2024) and faces (Gross and Crofton, 1977; He et al., 2024) were rated less favorably on various aesthetic measures when immoral background information was presented alongside the stimuli [i.e., intriguing landscape was a result of human caused pollution and people acted immorally, respectively (Gross and Crofton, 1977; He et al., 2024)]. Such studies draw on the Feelings as Information Theory (FAIT) (Clore and Huntsinger, 2007), which posits that feelings and emotions underlie subsequent evaluations. In such cases, for instance, if a landscape or a person is related to immoral behavior, they will be evaluated as less aesthetically pleasing because the viewer conflates the negative feeling she develops toward the stimulus with its aesthetic evaluation (Clore and Huntsinger, 2007).

However, in line with the distancing-embracing model (Menninghaus et al., 2017), feelings and emotions do not affect aesthetic evaluation in the same manner when evaluating art. When dealing with art, people are able to bracket out or even embrace negative emotions—hence negative emotions do not negatively affect subsequent aesthetic evaluations. At the same time, it is important to mention that the distancing-embracing model explains primarily the enjoyment of artworks with ethical content (i.e., artworks that do not cause any direct harm to living beings) (Menninghaus et al., 2017), while FAIT is not art-specific, and as such, it mostly refers to activities or phenomena with ethical value (i.e., phenomena that have true bearing on the world and living beings) (Clore and Huntsinger, 2007). It remains to find out whether people are also able to compartmentalize and embrace negative emotions even when these arise in response to artworks with ethical value—artworks that cause direct harm to living beings.










Previous studies suggest that people appraise negative emotions such as sadness (Hanich et al., 2014), anger (Wagner et al., 2016), and disgust (Wagner et al., 2014) more positively when these emotions are elicited by art (Gerger et al., 2014). Additionally, many artworks with ethical deficits are generally accepted and even form part of art history's canon. Therefore, we speculate that labeling immoral behavior art may render it more acceptable as well. As people are more likely to adopt an art-specific processing mode in art contexts (Brieber et al., 2015; Muth et al., 2017), it seems reasonable that immoral behavior will be even more tolerated when presented as art in a dedicated art setting.

The current study

We tackled these questions by presenting participants the same photographs under three different conditions: online as non-art (*non-art-online*), online as art (*art-online*), and in an art gallery as art (*art-gallery*). All photographs were presented alongside a short description, explaining the behavior a given person engaged in for making them. In the two art conditions, this person was an artist, whereas in the non-art condition, this person was not presented as an artist. All photographs and descriptions are shown in Table 1. In some photographs, the person and the act themselves were shown (for example, see *Randale* in Table 1), while in others, the object resulting from the behavior was shown but not the act itself (see *Stolen*, Table 1). Overall, there were 10 immorally loaded photographs and 10 morally loaded photographs. We focused on visual art, and specifically on photography for two main reasons. First, the artworks that inspired the study are from the domain of visual art. Second, due to its non-fictional nature, which often requires existing phenomena to be photographed, photography was a feasible and clear medium to “create” artworks with clear ethical value that clearly affect people, other beings and the environment.



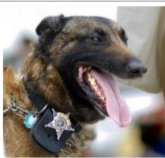





Writings on the link between art and morality traditionally focus on two types of judgments: aesthetic and moral, and the interaction between them (Carroll, 2000; Clavel-Vazquez, 2018). In line with this literature, our dependent variables comprised aesthetic (by aesthetic, we mean overall subjective evaluations of

TABLE 1 All pictures used in the study, their details and art and non-art descriptions.

Picture	SMID image code/ morality rating	Fictive artist's name, title, year, picture materials and dimensions (in cm)	Description (<i>art-gallery</i> and <i>art-online</i> conditions)	Description (<i>non-art-online</i> condition)
Immorally loaded pictures				
	b2_p20_18 1.194	Oliver Zhang Neglected, 2021, pigment print, 18 x 13	The artist chained a stray dog next to the road and left it alone for several days.	The owner, Oliver Zhang chained his dog next to the road and left him alone for several days
	b10_p136_12 2.115	Amber Johnson Stolen, 2021, pigment print, 25 x 20	The artist stole a bicycle and sold the remaining parts in a gallery.	Jogger Amber Johnson stole a bicycle and sold the remaining parts at a market.
	b10_p132_12 1.963	Mariya Popov Homeless, 2021, pigment print, 40 x 30	The artist photographs homeless people without their consent and publishes them in an illustrated book ("Home Sweet Home", 2022).	The journalist Mariya Popov takes photos of homeless people without their consent and publishes them in a newspaper.
	b15_p349_3 2.067	Anish L. Schmidt Randale, 2022, pigment print, 35 x 25	The artist vandalized a car in the city.	Office worker Anish L. Schmidt vandalized a car in the city.
	b11_p176_14 1.393	Antonia James Freedom, 2022, pigment print, 30 x 40	The artist booked an elephant ride during her stay in Thailand and photographed the animals	Traveler Antonia James booked an elephant ride during her stay in Thailand and photographed the animals.
	b13_p236_12 2.097	Igor S. Chapman Food chain, 2023, pigment print, 30 x 21	The artist installs slaughtered pigs in a room of a museum.	The hobby butcher Igor S. Chapman stores slaughtered pigs in a room in the neighbourhood.
	b13_p241_8 2.000	Julieta Montana Cigarettes on the beach, 2022, pigment print, 40 x 30	The artist left the cigarette butts on the beach.	The tourist Julieta Montana left the cigarette butts on the beach.
	b15_p409_19 1.875	Aisha Patel Black Gold, 2023, pigment print, 30 x 21	The artist coloured the pelicans' plumage black with oil.	Harbor worker Aisha Patel dyed the pelicans' feathers black with oil.
	b10_p138_3 1.636	Pascal Y. Toussaint Take what you deserve, 2023, pigment print, 30 x 40	The artist stole credit cards from art dealers during an auction.	The janitor Pascal Y. Toussaint stole credit cards from art dealers during an auction.




(Continued)

TABLE 1 (Continued)

Picture	SMID image code/ morality rating	Fictive artist's name, title, year, picture materials and dimensions (in cm)	Description (<i>art-gallery</i> and <i>art-online</i> conditions)	Description (<i>non-art-online</i> condition)
	b15_p345_9 1.667	Sid James F*ck off, 2020, pigment print, 25 x 25	The artist gives passers-by the middle finger.	Pedestrian Sid James gives passers-by the middle finger.
Morally loaded pictures				
	b15_p292_3 4.194	Lauren Dee "Sky" no title, 2023, pigment print, 30 x 21	The artist spent a day talking to every homeless person in her neighbourhood.	Resident Lauren Dee "Sky" talked to every homeless person in her neighbourhood in one day.
	b2_p21_15 4.207	Jonas J. Jackson Good boy, 2021, pigment print, 30 x 21	The artist spent a week on patrol with a police dog.	Dog lover Jonas J. Jackson spent a week on patrol with a police dog.
	B15_p295_9 4.525	Jessica Jordan security, 2023, pigment print, 40 x 30	The artist spent every Tuesday with infants in a children's hospital ward.	Volunteer Jessica Jordan spent every Tuesday with young children on a children's hospital ward.
	b15_p358_15 4.467	Jamie Marshall Lifetime, 2021, pigment print, 34 x 24	The artist climbed a steep mountain together with teenagers with educational issues.	The mountaineer Jamie Marshall climbed a steep mountain together with teenagers with educational issues.
	b9_p124_12 4.433	Ibraheem Perry Contact, 2021, pigment print, 30 x 40	The artist carried a "free hugs" sign and hugged strangers.	Ibraheem Perry, a member of the organisation <i>freehugs</i> UK, carries a "free hugs" sign and hugs strangers.
	b2_p34_1 4.414	Orla O'Ryan Once upon a time..., 2023, pigment print, 21 x 30	The artist herself recreated the activities of unknown women from history.	The historian Orla O'Ryan herself recreated the activities of unknown women from history.
	b15_p403_13 4.250	Karl Lane Humans of London, 2021, instant film, 0.85 x 0.64	The artist photographs everyday moments of Londoners with an instant camera and gives them to them.	Londoner Karl Lane photographs everyday moments of Londoners with an instant camera and gives them to them.

(Continued)

TABLE 1 (Continued)

Picture	SMID image code/ morality rating	Fictive artist's name, title, year, picture materials and dimensions (in cm)	Description (<i>art-gallery</i> and <i>art-online</i> conditions)	Description (<i>non-art-online</i> condition)
	b13_p216_9 3.882	Carlos G. G. Ortega Sheltered, 2023, pigment print, 40 x 40	The artist spent a year working in a sanctuary for chimpanzees in Congo.	The teenager Carlos G. G. Ortega spent a year working at a sanctuary for chimpanzees in the Congo.
	b8_p114_12 3.983	Helena Arnstein Feeding time, 2021, pigment print, 40 x 30	The artist guards the nests of endangered songbirds.	Ornithologist Helena Arnstein guards the nests of endangered songbirds.
	b4_p58_14 4.281	Vasyl V. Kushnir Peace on Earth, 2022, pigment print, 35 x 25	The artist created this piece of land art with plastic waste from his home village.	The teacher Vasyl V. Kushnir created this symbol with plastic waste from his home village.

The first 10 pictures document immoral behavior and the latter 10 document moral behavior. All pictures have been reproduced with permission from Crone et al. (2018), The Socio-Moral Image Database (SMID): A novel stimulus set for the study of social, moral and affective processes.: <https://osf.io/2rqad/>. <https://doi.org/10.1371/journal.pone.0190954>.

an artwork) and moral evaluations. To address aesthetic quality, we asked participants to rate how beautiful each photograph was, how interesting each photograph was, and how much they would like to hang each photograph in their home. We also asked participants to rate their happiness level. Ethical evaluations were obtained indirectly by asking participants to rate their subjective emotional reaction to each photograph. This was done for two main reasons. First, it is believed that moral evaluations are rooted in intuitive emotional responses to an elicitor rather than in logical moral rationalizing. For example, when watching a person stealing a purse from a blind person, individuals may intuitively say “this is disgusting” rather than “this is immoral” (Tybur et al., 2013). Hence, measuring relevant emotional responses could, in fact, be a more accurate measure of morality (Graham et al., 2013; Prinz, 2006). Second, in an online pre-study not reported here in which participants provided direct moral ratings, these measures did not yield significant results. As their inclusion risked revealing our research question, and more importantly, it may have pushed participants to engage in more rational moral evaluations, which may have otherwise been dismissed and could have interfered with the immediacy of moral evaluations (Graham et al., 2013). Therefore, we removed these measures in the main study.

Of main interest were the emotions of disgust and anger. While disgust is often felt in response to biological sanctity or purity, moral disgust (i.e., disgust felt in response to perceived immoral behavior) has been shown to be a stable measure of immoral perceptions of others (Hutcherson and Gross, 2011). People tend to feel moral disgust toward individuals they find immoral, and the intensity of disgust does not attenuate based on

the individuals' subsequent behavior (Russell and Giner-Sorolla, 2011). Just like pathogen disgust, moral disgust is therefore instrumental in promoting avoidance behavior (Hutcherson and Gross, 2011; Tybur et al., 2013). Additionally, evidence suggests that a signature feature of pathogen disgust—facial expression is also observed in domains that have moral content but no pathogen content (Cannon et al., 2011; Chapman et al., 2009).

Moral anger (i.e., anger felt in response to perceived immoral behavior), by contrast, is felt in response to immoral acts that directly involve the self. It is temporary and flexible; as such, it represents contextualized evaluations of immoral behavior (Russell and Giner-Sorolla, 2011), and it instructs agents to actively act against those who behave immorally and threaten the self (Hutcherson and Gross, 2011). A hallmark of art is that it provides a safe haven with no direct threat to beholders (Menninghaus et al., 2017); therefore, disgust was our most relevant measure of immorality.

In addition to moral disgust and anger, participants also rated the other main emotions: sadness [which was also found to play a role in moral valuations (Hutcherson and Gross, 2011)], fear, happiness and surprise. Lastly, participants also rated how well they understood each photograph. We expected lower understanding rates among the art group as people often tend to question their understanding when dealing with works of art (Kreidler and Kreidler, 1972), whereas in daily situations, people are more likely to base moral evaluations on heuristics (Graham et al., 2013). We did not formulate specific hypotheses regarding surprise ratings: we reasoned that it might not differ between

TABLE 2 Hypotheses 1–3.

Measures	Predicted results pattern
Negative emotions (sadness, disgust, anger, fear)	<i>art-gallery < art-online < non-art-online</i>
positive ratings (beauty, happiness, interest, hang-up)	<i>art-gallery > art-online > non-art-online</i>
Understanding	<i>art-gallery, art-online < non-art-online</i>
Surprise	<i>Exploratory factor – no hypotheses</i>

Predicted results pattern for pictures depicting immoral behavior.

groups because the initial shock caused by seeing the immoral behavior should not be attenuated in the context of art. At the same time, surprise could increase or decrease, depending on how familiar participants are with Contemporary art with ethical value.

For the sake of simplifying the hypotheses, we divided the dependent variables into positive and negative constructs. For a summary of the hypotheses, please see Tables 2, 3. Based on the literature discussed above, we hypothesized the following regarding immoral behavior:

- H1: Implications for negative emotions.
- H1a – Framing effect: Participants who view the immoral behavior as art will report feeling a lower degree of negative emotions (sadness, disgust, anger and fear) compared to participants who view the behavior as non-art acts.
- H1b – Context effect: Gallery visitors will report feeling a lower degree of negative emotions than online participants.
- H2: Implications for positive ratings.
- H2a – Framing effect: Participants who view the immoral behavior as art will provide higher positive ratings (i.e., beauty, happiness, interest and hang-up) than participants who view the behavior as non-art.
- H2b – Context effect: Gallery visitors will provide higher positive ratings than online participants.
- H3: Implication for understanding.
- H3: Participants who view the immoral behavior as art (both online and in the gallery) will provide lower understanding rates than participants who view the behavior as non-art.

Note that Hypotheses 1, 2, and 3 cover *immoral* behavior only. This is because immoral behavior was the focus of the study and, more importantly, because we had no reason to expect any significant difference between the groups for moral behavior. In addition to these hypotheses, we predicted that on the whole:

- H4: Pictures depicting moral behavior will be rated less negatively (lower sadness, disgust, anger, and fear rates) than pictures showing immoral behavior, regardless of the condition.
- H5: Pictures depicting moral behavior will be rated more positively (higher happiness, beauty, hanging-up and interest rates) than pictures showing immoral behavior, regardless of the condition.
- H6: Participants will provide higher understanding rates for pictures depicting moral, compared to immoral behavior, regardless of the condition.

In summary, we predict that when participants evaluate immoral behavior as engaged in by artists, they will rate it less

TABLE 3 Hypotheses 4–6.

Measures	Predicted results pattern
Negative emotions (sadness, disgust, anger, fear)	<i>moral behavior < immoral behavior</i>
positive ratings (beauty, happiness, interest, hang-up)	<i>moral behavior > immoral behavior</i>
Understanding	<i>moral behavior > immoral behavior</i>
Surprise	<i>moral behavior < immoral behavior</i>

Predicted results pattern for morally vs. immorally loaded pictures.

negatively and more positively compared to when they believe that non-artist people commit the same behavior. We predict those contextual factors, including physical gallery surrounding and people’s motivations, expectations and interests, will intensify this effect, such that immoral behavior presented as art in an art gallery will be even more tolerated. These predictions differ slightly from previous results (Gerger et al., 2014; Wagner et al., 2016, 2014), that negative emotions are felt with the same intensity in the context of art but are evaluated more positively. Our main reason for diverging from these results is the nature of the presentation in our study. In comparison to previous studies (Wagner et al., 2016, 2014), each picture in our study was presented alongside a short description to ensure that its content is clearly understood by participants (see further details in the Method section). We also included an exhibition introductory text in all conditions. We predicted that these sources of information would encourage participants to engage more deeply with the pictures before rating them than in previous studies, where participants may have responded more instantly. Our prediction is in line with previous studies showing that including contextual information, such as titles, may increase the understanding of certain artworks (Leder et al., 2006). This procedure also seems to more closely resemble real-life art evaluations, as artworks encountered in museums or galleries are often accompanied by an exhibition introduction, titles of the works, and short descriptions of the works.

Methods

Transparency and openness

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study, and the study follows JARS (Appelbaum et al., 2018). All data and analysis code are available at: https://osf.io/zf476/?view_only=7f6a179a26664e5ba3ac094e9a6a7991. All research material is presented below.

Participants

In total 140 participants ($M_{\text{age}} = 27.8$ years, $n_{\text{female}} = 103$, $n_{\text{male}} = 32$, $n_{\text{non-binary}} = 4$, 1 n/a, out of which $n_{\text{students}} = 97$) were recruited. Participants in the *art-gallery* condition ($N=43$, $M_{\text{age}} = 25.1$ years, $n_{\text{female}} = 31$, $n_{\text{male}} = 9$, $n_{\text{non-binary}} = 2$, 1 n/a, out of which $n_{\text{students}} = 36$) were recruited first, via posters, online

university distribution lists and the email distribution list of the AOA;87 *art gallery* in Bamberg, where the study took place. The advertising posters, which were distributed in various locations on the university campus, promoted a photography exhibition at the locally situated gallery. We aimed to attract art enthusiasts, as they are likely to better reflect the view of museum and gallery goers who seem to accept artworks with ethical deficits. One notable limitation of Empirical Aesthetics research is that samples often comprise solely psychology students who are not necessarily interested in art. It is questionable to what degree observations based on such participants can accurately reflect the experiences of art lovers who are accustomed to interacting with art, appreciating it, and actively seeking and creating opportunities to engage with it. Our aim was for the *art-gallery* condition to not only differ from the online conditions in terms of physical surroundings, but also in the motivations and interests of the participants, as all these factors are likely to collectively contribute to the tolerance of immoral behavior when labeled art.

During the exhibition's opening hours, participants took part in the study alongside their gallery visit. Thirty-six of the participants were students, the majority of whom were majoring in psychology. Around 20 participants reported visual impairments, all of them corrected with glasses or contact lenses, except one participant with red-green color blindness. Ultimately, 39 participants were considered for the analysis, as four individuals either submitted their questionnaires prematurely or filled them out incorrectly. Only two participants questioned whether the displayed stimuli were actual artworks, but they were easily convinced with straightforward responses. In general, the participants were unaware of the study's purpose.

Online participants were recruited by sharing a link to the study through a university email distribution list, student groups from various faculties, and word of mouth. The participants were randomly assigned to one condition via a hyperlink. Forty-nine ($M_{\text{age}} = 31.8$ years, $n_{\text{female}} = 36$, $n_{\text{male}} = 12$, $n_{\text{non-binary}} = 1$, out of which $n_{\text{students}} = 30$) were randomly assigned to the *art-online* condition, and 48 participants ($M_{\text{age}} = 29.5$ years, $n_{\text{female}} = 36$, $n_{\text{male}} = 11$, $n_{\text{non-binary}} = 1$, out of which $n_{\text{students}} = 31$) to the *non-art-online* condition. All participants had normal or corrected-to-normal vision.

Materials

Pictures

All stimuli used in the study were chosen from the Socio-Moral Image Database (SMID) (Crone et al., 2018). SMID is the most extensive standardized moral stimulus set assembled to date, containing 2,941 freely available photographic images (Crone et al., 2018). The SMID was validated with more than 800,000 individual judgments from 2,716 participants with a diverse cultural background and through ensuring variety of political compasses, with normative ratings currently available for all images on affective valence and arousal, moral wrongness, and relevance to each of the five moral values posited by Moral Foundations Theory (MFT) (Graham et al., 2013). MFT proposes an alternative to monist theories of morality that view moral decisions as based on a single principle (traditionally, justice) or a dual principle (normally,

justice and care). Instead, MFT is plural, positing that moral evaluations are based on five factors: care/harm, fairness/cheating, loyalty/betrayal, authority/subversion and sanctity/degradation (Graham et al., 2013). According to MFT, these variables are evolutionarily driven; hence, they provide pan-cultural moral foundations. However, as these foundations are culturally shaped, they manifest differently across cultures (Graham et al., 2013).

To ensure compatibility of the pictures, we applied a selection criterion according to which only pictures from the mid-range of morality and affective ratings could be chosen. This ensured that for the immoral picture selection, pictures seen as either extremely immoral or only slightly immoral were avoided. We reasoned that the former may not be susceptible to positive evaluation at all, while the latter might not yield clear negative reactions. Additionally, images with topics related to World War II were excluded for cultural-historical reasons, as were images with sensitive content such as sexual violence, violence against LGBTQ+ individuals, drug abuse, and similar critical subjects. The selection was then narrowed down while ensuring roughly an equal number of pictures, including humans, animals, and objects as the theme in each condition.

After choosing the pictures, a brief description (1–2 sentences) was constructed for each picture, presenting the action taken as either art or non-art act. Thus, even if a picture itself did not show an explicit action (e.g., a bicycle wheel in the immoral category), the description accompanying the picture emphasized the action of the artist/non-artist person engaged in for the sake of its creation. It was presented to ensure that participants understood the behavior and focused on it in their ratings. We took measures to ensure that the descriptions do not depart from the initial act depicted in the pictures, as they were rated at the SMID. The descriptions were carefully crafted such that they clearly and briefly described the *action* taken by the person/artist but remained purely descriptive and avoided any hints about the *intentions* behind the actions as not to bias participants. One of our predictions was that when beholders assess behavior as art, they denote or assume intentions on the side of the artist, which they would not consider if an artist did not take action. Even if implicit, such assessments could influence the acceptance or rejection of certain behaviors as art. Therefore, describing the intentions could interfere with these natural processes undertaken by participants and overshadow our results completely. The final immoral picture selection included scenarios showing people abusing animals, abusing other people, stealing, and more. The moral pictures included mostly people behaving proactively toward others (e.g., providing free hugs, caring for other people or animals). All pictures were fitted to be 400 pixels in height (width was matched accordingly and varied depending on the picture), to ensure that the picture and its description could easily be seen on one screen in total and participants did not have to scroll down to read the description or see the whole picture.

Additionally, in the art condition, a made-up artist's name, artwork title, year of creation, and short description were presented underneath the pictures, like in a physical exhibition. In the non-art condition, the same name and descriptive information appeared underneath the picture, except the picture was not presented as art, hence the title and year were excluded. When needed, we introduced very slight variations in wording to match each

condition: for example, for the work “Stolen,” the art description said that the stolen bicycle parts were sold in the gallery, while the non-art condition mentioned that they were sold at a market.

For the gallery exhibition, all photographs were printed on high-quality photographic paper by the university print shop and framed with plain wood frames. To model a real gallery exhibition, the accompanying information (identical to the *art-online* condition) was presented on labels. All labels were printed on A4 paper with black font on a white background, cut to a conventional gallery label size, and affixed on the wall, below the framed photographs. A detailed list of all photographic stimuli, their SMID's morality ratings, titles, materials, dimensions, and descriptions in both the art and non-art conditions can be found in [Table 1](#).

Introductory text

To better model real-life art viewing conditions, in the two art conditions (gallery and online) an exhibition introductory text was included (see [supplementary material](#)). The text was written together with the AOA's professional staff. In both art conditions, the text referred to a real gallery exhibition and included the gallery's name, logo and address. In the non-art condition, the text was matched in length, details, and style, but instead of presenting the pictures as genuine artworks created by artists, they were presented as common pictures taken by various ordinary people.

Art interest questionnaire

The Art Interest Questionnaire ([Leder et al., 2006](#)) was used to control for general interest in art across the three groups. The questionnaire comprises nine statements addressing different connections to art. We augmented the questionnaire with an extra question on interest in contemporary art: “I am interested in contemporary art.” The questionnaire consisted of 10 questions on participants' interest in art, with responses on a 7-point scale ranging from “not at all” to “very much.” The results were analyzed using an item-response theory multilevel Bayesian model assuming correlated responses between questions, with group membership as a main effect and participants as random effect. The results showed higher interest in art for the *art-gallery* condition compared to both online conditions [$P(\text{art-gallery} > \text{non-art-online}) = 100\%$, $P(\text{art-gallery} > \text{art-online}) = 99.9\%$, mean and 97% credible interval of the difference between groups was 0.38 (0.14, 0.58) for *art-gallery* vs. *non-art-online* conditions and 0.35 (0.11, 0.56) for *art-gallery* vs. *art-online* conditions]. This difference was expected as our strategy was to increase the ecological validity of the study by attracting art enthusiasts to the gallery exhibition. There was no significant difference in interest in art between the two online groups [$P(\text{art-online} > \text{non-art-online}) = 62.8\%$, mean and 97% credible interval for the difference was 0.03 (−0.18, 0.24)].

Moral identity questionnaire (MIQ)

The Moral Identity Questionnaire (MIQ) ([Black and Reynolds, 2016](#)) was employed to test whether there were any significant differences in participants' fundamental moral orientations across

the groups. The questionnaire was translated into German, with expert input from the Chair of English Linguistics of the University of Bamberg. A methodological asset of this questionnaire is that it is not correlated with political orientation or education level. It was found that only age is moderately correlated with the MIQ score; as we had a homogeneous age distribution across the different test groups, this relationship was not a problem for us. The results were analyzed using an item-response theory multilevel Bayesian model assuming correlated responses between questions, with group membership and questionnaire subscale as main effect, an interaction term, and participants as random effect. The results show no significant difference between groups for either subscale. For Moral Self: $P(\text{art-gallery} > \text{non-art-online}) = 66.1\%$, $P(\text{art-gallery} > \text{art-online}) = 58.9\%$, $P(\text{art-online} > \text{non-art-online}) = 58.4\%$, mean and 97% credible interval of the difference between groups was 0.002 (−0.02, 0.02) for *art-gallery* vs. *non-art-online* conditions, 0.001 (−0.02, 0.02) for *art-gallery* vs. *art-online* conditions, and 0.002 (−0.02, 0.02) for *art-online* vs. *non-art-online* conditions. For Moral Integrity: $P(\text{art-gallery} < \text{non-art-online}) = 86.2\%$, $P(\text{art-gallery} < \text{art-online}) = 52.8\%$, $P(\text{art-online} < \text{non-art-online}) = 89.1\%$, mean and 97% credible interval of the difference between groups was −0.01 (−0.04, 0.01) for *art-gallery* vs. *non-art-online* conditions, −0.001 (−0.02, 0.02) for *art-gallery* vs. *art-online* conditions, and −0.01 (−0.04, 0.01) for *art-online* vs. *non-art-online* conditions.

Procedure

The art gallery part of the study was conducted first, and online data collection did not start until this part of the study was completed. This was done to inhibit speculation among *art-gallery* participants that the exhibition was organized for the sake of the study. The field study was advertised 2 weeks before the exhibition opening. Advertisements comprised posters placed in different locations around the university and the city center and emails sent through the art gallery's newsletter. The poster was visually designed such that the exhibition took center stage, and the psychological study seemed only incidental. During weekend opening hours, passers-by could enter the gallery. During the week, university students were also invited to use an online booking system to book timeslots to visit the gallery in groups of up to five people.

The gallery exhibition space and rating procedure are illustrated in [Figures 1a–d, f](#). Once inside the gallery, visitors were initially able to move around and view the artworks undisturbed. The experimenters were present in the gallery and acted as though they were curators. They sat quietly at the information desk, seemingly occupied with other tasks, waiting for visitors to approach them with any questions. If visitors stayed in the gallery for longer than a few minutes and did not approach the “curator,” the experimenter offered them to take part in a study about the exhibition. If visitors agreed, they were handed a clipboard with 23 A4 papers and a pen (see [Figure 1e](#)). On the first page participants found the exhibition introductory text. The text was about one page long; it was written in collaboration with the gallery staff to match the typical writing style of the gallery. The exhibition was titled “Portrait, Photography, Performance?;” the idea behind this title

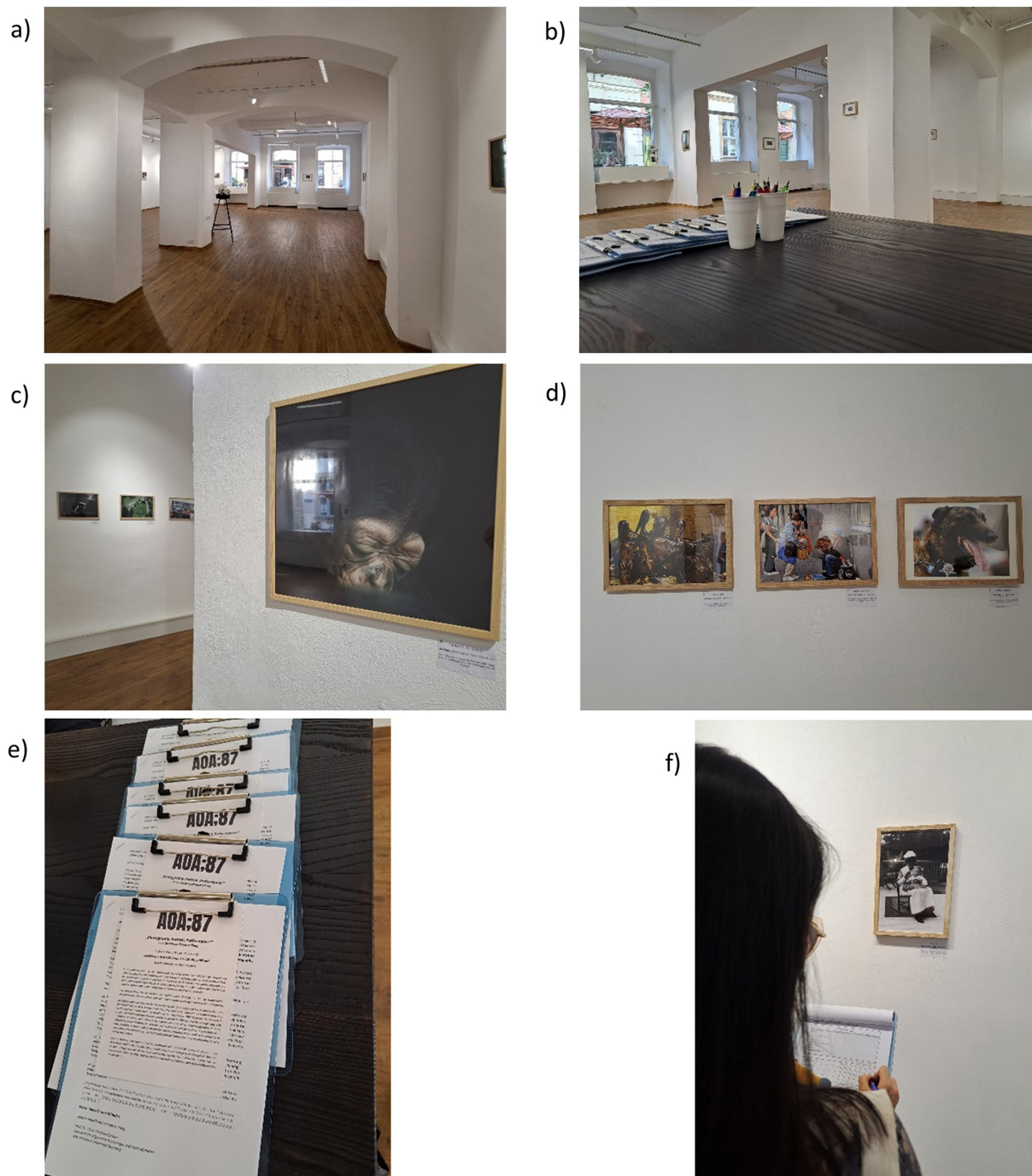


FIGURE 1

Pictures of the gallery presentation and testing procedure. (a) overall view of the gallery, (b) view of the gallery from the typical experimenter's position sitting at the desk, (c) various photos shown in the exhibition, (d) various photos shown in the exhibition, (e) clipboards with the questionnaires, handed to participants, and (f) a participant in the study, filling out the questionnaire.

was that we used mainly photographs, which, as the introductory text suggested, document performance art that offers a social-political portrait of our society.

On the second page participants found general instructions. They were encouraged to behave as naturally as possible: they were given the freedom to either rate each artwork directly after viewing it or to walk around the exhibition again and rate each artwork when they choose to, with the aim of creating ecologically valid

experiences (Carbon, 2017). After the instructions page, 20 pages appeared, one for each artwork. Participants were instructed to write the corresponding artwork letter at the top of each page, allowing us to match artworks to ratings. Letters were not pre-printed on pages to avoid inhibiting the free exploration. On each artwork page, 10 statements appeared, which participants rated on a 1 ("does not apply at all") to 7 ("Fully applies") Likert scale (translated from German). The statements appeared in the

following order and were read as follows (translated from German): “I feel happiness,” “I feel disgust,” “I feel anger,” “I feel sadness,” “I feel surprise,” “I feel fear,” “I find the artwork interesting,” “I find the artwork beautiful,” “I understand this artwork,” “I would like to hang this artwork in my own home.” The emotional ratings appeared first to minimize the influence of the subsequent ratings on them. We reasoned that beginning with the affective ratings was more likely to make participants view the study as focused on their subjective evaluations and thus less questionable. Once participants rated all artworks they were asked to take a seat at the desk. They were then given a second pen-and-paper questionnaire and were asked to provide demographic data and complete the Art Interest Questionnaire and MIQ, using the same 1–7 Likert scale.

The online study was conducted using LimeSurvey version 3.25.0+201117 within a local implementation. Participants retrieved the link from the official website of the University of Bamberg or received it via email. The study was advertised as a study to assess images and their aesthetics. Upon clicking the provided link, participants were randomly allocated into either the art or non-art condition via hyperlink. In both conditions, similar instructions were provided: Participants were instructed to complete the study on a PC, notebook PC, or a large-size tablet, but not on smaller devices like smartphones. They were asked to view the pictures, read the accompanying descriptions, and rate them according to their feelings. Participants were told that they could withdraw from the study without consequences at any time.

Upon providing demographic data, the first picture appeared on the screen. Pictures appeared on the left side of the screen, one by one, with their description above them. Beneath each picture, a Likert scale identical to this in the Gallery condition was shown to remind participants of the rating instructions. On the same screen, participants were required to scroll down and provide the necessary ratings. The statements’ wording and order were identical to the Gallery condition, except that the word “artwork” was replaced by “picture” in the non-art condition. The picture, description and statements appeared on the screen for an unlimited amount of time, until participants rated all the statements and clicked the “next” button. The pictures appeared in the same mixed (immoral and moral) randomly predetermined order. After rating all the pictures, participants completed the Moral Identity Questionnaire (Black and Reynolds, 2016) and Art Interest Questionnaire (see Leder et al., 2006).

All procedures were in accordance with the national ethical standards on human experimentation and with the Declaration of Helsinki of 1975, as revised in 2008. The study was in full accordance with the ethical guidelines of the University of Bamberg and was approved by an umbrella evaluation on psychophysical testing of the University’s local Ethics committee (Ethikrat) on 18 August 2017.

Gallery presentation

AOA:87 Gallery has two branches: In Bamberg and Berlin. In Bamberg, the gallery is located centrally within the old city center. It is easily accessible for passers-by, and some exhibits can be seen from the outside through large glass windows facing the street. The gallery walls are painted a uniform white, and the illumination can

be adjusted depending on the placement of the exhibited artworks. The exhibition space of the gallery is about 50 square meters in size, with two pillars in the middle perceptually dividing the room in two halves. The pictures were hung in prominent places around the gallery walls, following collaborative planning with the gallery staff. The two types of pictures (depicting moral and immoral behavior) were mixed up around the exhibition space. Pictures were hung at 1.65 meters in height, corresponding to a lower estimated visitor’s average viewing height. The labels with the artists’ details and descriptions were stuck underneath the pictures, which ensured that each picture was clearly visible during a tour. A price list for the artworks was also displayed in the gallery. Calm music was played during the opening hours. During the study, the experimenter (the second or the third author or both) sat at an information desk at the back corner of the gallery. The exact room layout can be retrieved from Figure 2.

Results

Statistical analysis

We fitted participants’ responses for all scales using item response theory (IRT) model, specifically a series of multi-level Bayesian generalized linear models with cumulative ordered logit likelihood. The model assumes that an internal variable that underlies the response (e.g., a beauty rating) is continuous but is mapped onto seven discrete response levels via a many-to-one mapping based on fitted cut points. This way, we explicitly model the fact that discrete response levels are exogenous to the initial decision-making process (feeling of beauty) and are part of the experimental design. In contrast to linear models, such as ANOVA, IRT model can make predictions at the level of individual responses rather than averages. At the same time, the fitted group-average response can be interpreted in the same way as simple arithmetic means in conventional analysis. For further details, please refer to de Ayala (2022).

As part of the model evaluation process, we also fitted four alternative models with #1) independent random effects only for participants, #2) independent random effects only for images, #3) independent cross-classified effects for participants and images, #4) independent random effects for participants, but correlated random effects for images. In the latter case, we assumed a correlated random effect of image, i.e., an image that is judged to be more *beautiful* than average could also lead to being perceived as less *disgusting* than average, etc.

The formal description of Model #4 is below. The other three models differed in that the random factor for the image was without the correlation term and whether specific random terms were included. We employed weakly regularizing priors for all parameters. The model was programmed and sampled using Stan probabilistic programming language (Vehtari et al., 2017). Subscript i indicates a data point index, i.e., a formula for the i^{th} response and independent variables.

$$\begin{aligned} \text{Response}_i &\sim \text{OrderedLogit}(\phi_i, \kappa[\text{Scale}_i]) \\ \phi_i &= \alpha[\text{Scale}_i, \text{Group}_i, \text{ImageType}_i] \\ &+ \alpha_P[\text{Scale}_i, \text{Participant}_i] + \alpha_{IM}[\text{Scale}_i, \text{Image}_i] \end{aligned}$$

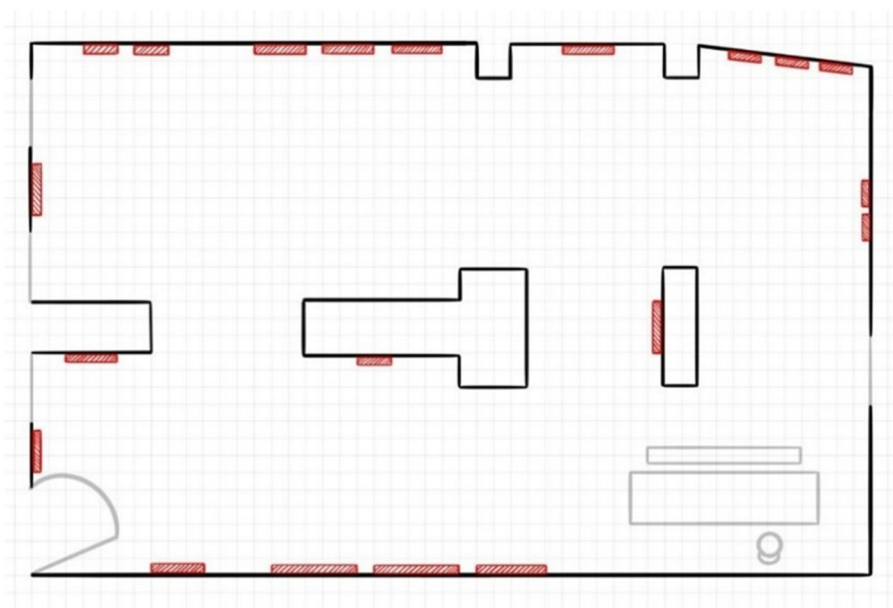


FIGURE 2

Layout sketch AOA; 87 gallery. Layout sketch of AOA; 87 gallery in Bamberg that is not to scale. The line colour black corresponds to solid walls, and the line colour grey to windows, doors, and the location of the test management. The red-coloured hatched rectangles illustrate the final positions of the exhibited photos – morally and immorally loaded photos were mixed throughout the gallery.

$$\begin{aligned}
 \alpha &\sim \text{Normal}(0, 1) \\
 \alpha_P[\text{Scale}_i] &\sim \text{Normal}(0, \sigma_P[\text{Scale}_i]) \\
 \alpha_{IM} &\sim \text{MVNormal}(0, \sigma_{IM} \cdot \rho_{IM} \cdot \sigma_{IM}) \\
 k &\sim \text{Normal}(0, 1) \\
 \sigma_P &\sim \text{Exponential}(1) \\
 \sigma_{IM} &\sim \text{Exponential}(1) \\
 \rho_{IM} &\sim \text{LKJcorr}(2)
 \end{aligned}$$

The four models were compared via a leave-one-out (LOO) information criterion (Vehtari et al., 2017), which computes an expected log-predicted density (ELPD) that expresses expected out-of-sample deviance based on the posterior distribution of in-sample deviance, see Vehtari et al. (2017) for details. LOO information criterion is interpreted in the same way as other typical information criteria, such as Akaike or Widely Applicable Information Criteria (AIC and WAIC, respectively), with lower values indicating better goodness-of-fit given the penalty for model complexity. For our results, Model #4, with correlated random effects for images, provided a good balance between complexity and out-of-sample reliability, with other models ranking much lower in the comparison. The difference in expected log predicted density for a leave-one-out information criterion relative to the best model (mean \pm standard error) was $-1,897.9 \pm 58.7$, $-1,955.8 \pm 59.2$, and -14.9 ± 4.5 for models 1–3. Therefore, the results presented below are based on Model #4 with an independent random effect of the participant and a correlated random effect of the image.

$$\begin{aligned}
 \text{Response}_i &\sim \text{OrderedLogit}(\phi_i, \kappa[\text{Scale}_i]) \\
 \phi_i &= \alpha[\text{Scale}_i, \text{Group}_i, \text{ImageType}_i]
 \end{aligned}$$

$$\begin{aligned}
 &+ \alpha_P[\text{Scale}_i, \text{Participant}_i] + \alpha_{IM}[\text{Scale}_i, \text{Image}_i] \\
 \alpha &\sim \text{Normal}(0, 1) \\
 \alpha_P[\text{Scale}_i] &\sim \text{Normal}(0, \sigma_P[\text{Scale}_i]) \\
 \alpha_{IM} &\sim \text{MVNormal}(0, \sigma_{IM} \cdot \rho_{IM} \cdot \sigma_{IM}) \\
 k &\sim \text{Normal}(0, 1) \\
 \sigma_P &\sim \text{Exponential}(1) \\
 \sigma_{IM} &\sim \text{Exponential}(1) \\
 \rho_{IM} &\sim \text{LKJcorr}(2)
 \end{aligned}$$

For statistical significance, we reported the mean difference and 97% credible intervals plus the proportion of samples that were above or below zero. The credible interval is a range that contains 97% of the probability mass based on values from the sampled posterior distribution (CI, also called compatibility interval). The proportion of samples that were above or below zero can be easily interpreted in the following way: if the effect is positive, most of the probability mass is above zero; if it is negative, most of the probability mass is below zero.

Hypotheses testing

H1: Implications for negative emotions, for immoral behavior.

H1a – Framing effect: Participants who view the immoral behavior as art will report feeling a lower degree of negative emotions (sadness, disgust, anger and fear) compared to participants who view the behavior as non-art acts.

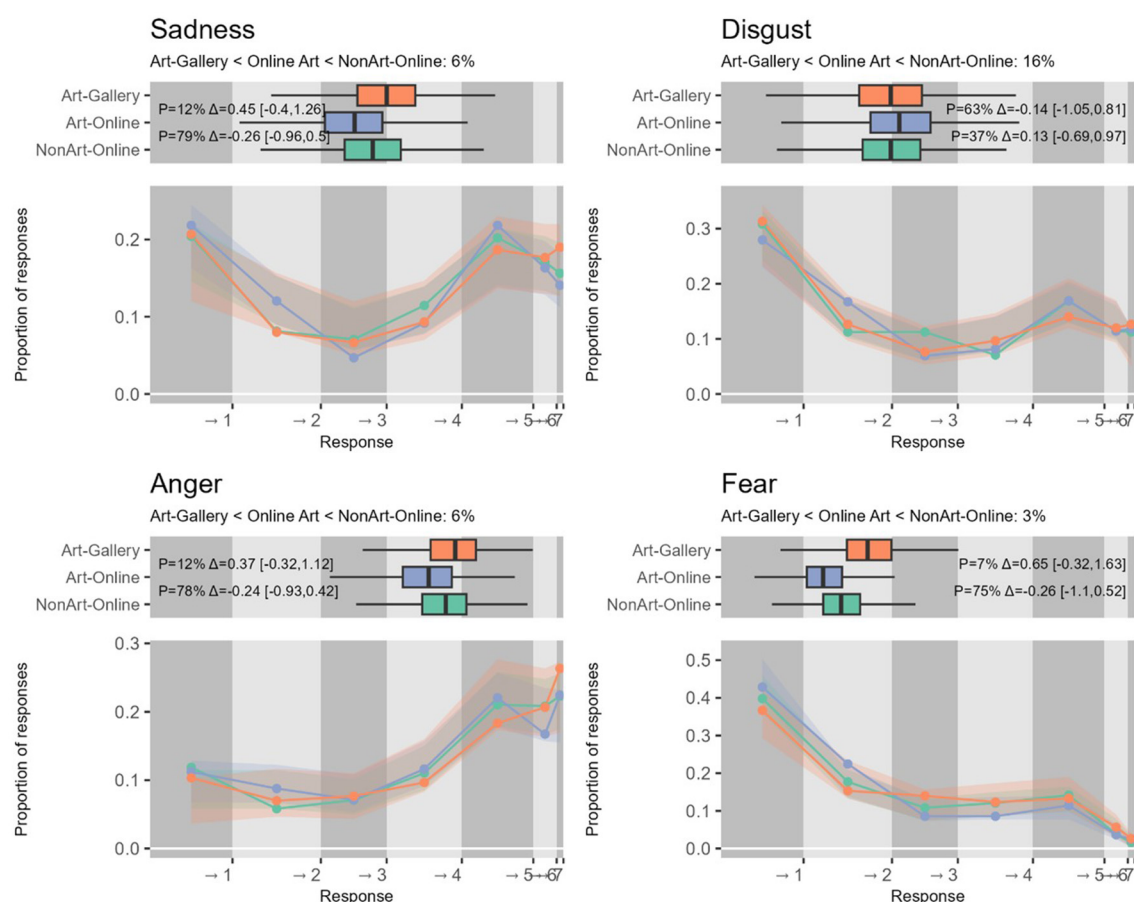


FIGURE 3

Negative emotional reaction to pictures depicting immoral behavior, split by viewing conditions. The lower panel in each plot shows the proportion of responses per response level. Circles and lines depict group-level average behavioral responses per level, stripes show 97% credible interval for posterior predictions. The upper panel in each plot shows group-level average responses. Text in-between conditions shows a pairwise comparison between two groups: The probability that the difference is statistically significant, the average difference and 97% credible interval for the difference. Text above each plot shows the probability that average group responses follow the order *art-gallery* < *art-online* < *non-art-online*.

H1b – Context effect: Gallery visitors will report feeling a lower degree of negative emotions than online participants.

Predicted result pattern: *art-gallery* < *art-online* < *non-art-online*.

No. There were no consistent differences between any of the groups. See Figure 3 for detailed results and statistics.

H2: Implications for positive ratings, for immoral behavior.

H2a – Framing effect: Participants who view the immoral behavior as art will provide higher positive ratings (i.e., beauty, happiness, interest and hang-up) than participants who view the behavior as non-art.

H2b – Context effect: Gallery visitors will provide higher positive ratings than online participants.

Predicted result pattern: *art-gallery* > *art-online* > *non-art-online*.

Mostly yes. There was a consistent effect of framing and context for beauty and happiness, with the highest ratings in the art-gallery, followed by art-online and non-art-online conditions. For hanging up and interest rates the overall pattern remained, but only the art-gallery differed significantly, thus there was only an effect of context. See Figure 4 for detailed results and statistics.

H3: Implications for understanding, for immoral behavior.

H3: Participants who view the immoral behavior as art (both online and in the gallery) will provide lower understanding rates than participants who view the behavior as non-art.

Predicted result pattern: *art-gallery*, *art-online* < *non-art-online*.

Yes. Presenting behavior as art lowered understanding rates. The difference was statistically significant both between the two online conditions (see Figure 5) and between the art-gallery group and non-art-online group. The probability that difference is statistically significant was $P=97\%$, the average difference and 97% credible interval for the difference were $\Delta = -0.6 [-1.41, 0.1]$. However, understanding was significantly higher for art-gallery than for art-online group.

Surprise: Presenting immoral behavior as art significantly increased surprise rates, with the effect being even stronger in the art-gallery condition, see Figure 6.

H4: Pictures depicting moral behavior will be rated less negatively (lower sadness, disgust, anger, and fear rates) than pictures showing immoral behavior, regardless of the condition.

Mostly yes. Pictures depicting moral behavior were rated lower for all four negative emotions, although the difference was

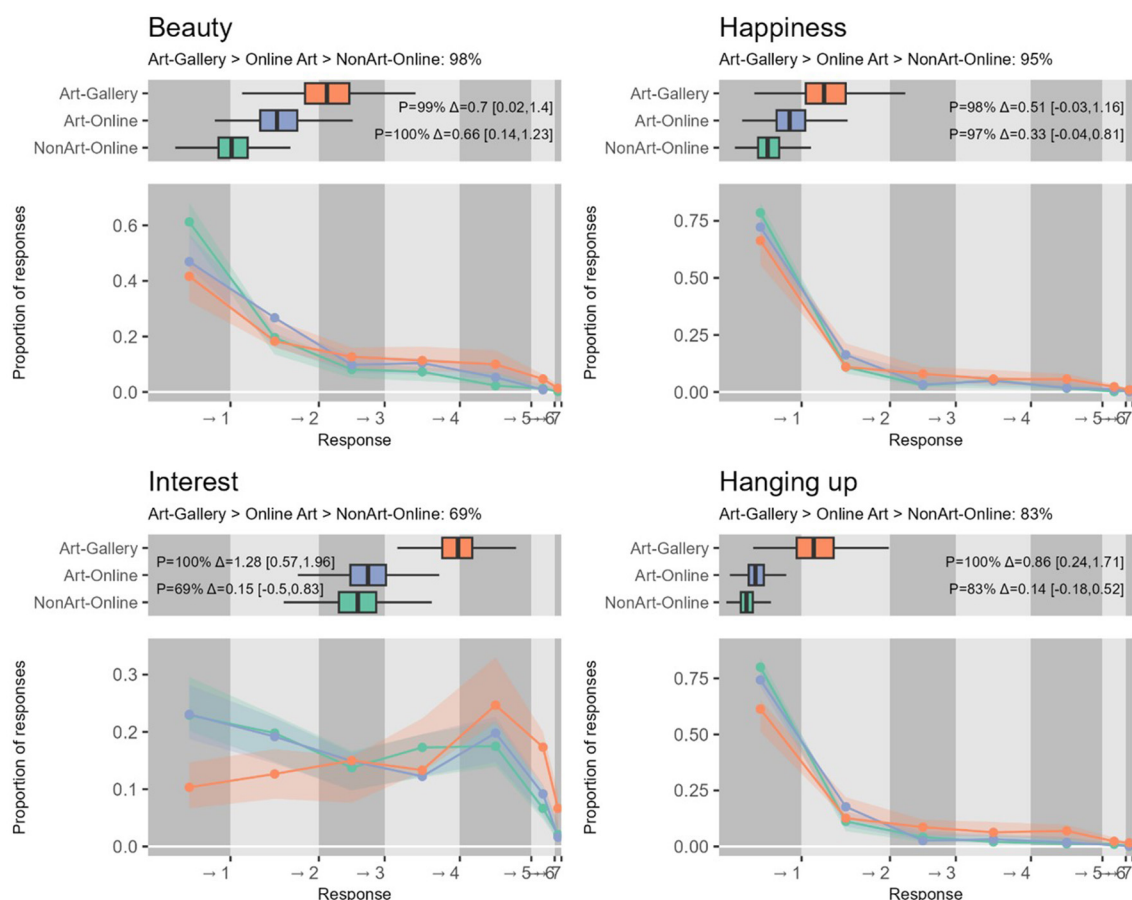


FIGURE 4

Positive ratings for pictures depicting immoral behavior, divided by viewing condition. The lower panel in each plot shows the proportion of responses per response level. Circles and lines depict group-level average behavioral responses per level, stripes show 97% credible interval for posterior predictions. The upper panel in each plot shows group-level average response. Text in-between conditions shows a pairwise comparison between two groups: the probability that the difference is statistically significant, the average difference and 97% credible interval for the difference. Text above each plot shows probability that average group responses follow the order *art-gallery* > *art-online* > *non-art-online*.

marginally significant for *disgust* and not statistically significant for *sadness*, see Figure 7.

H5: Pictures depicting moral behavior will be rated more positively (higher beauty, happiness, interest, and hanging-up) than pictures showing immoral behavior, regardless of the condition.

Mostly yes. Pictures depicting moral behavior were rated higher for all four positive variables, although the difference was marginally significant for *interest*. See Figure 8.

H6: Participants will provide higher understanding rates for pictures depicting moral, compared to immoral behavior, regardless of the condition.

Yes. Pictures depicting moral behavior were rated significantly higher for understanding than pictures depicting immoral behavior, see Figure 9.

Surprise: there was no significant difference in *surprise* between the two sets of images, see Figure 10.

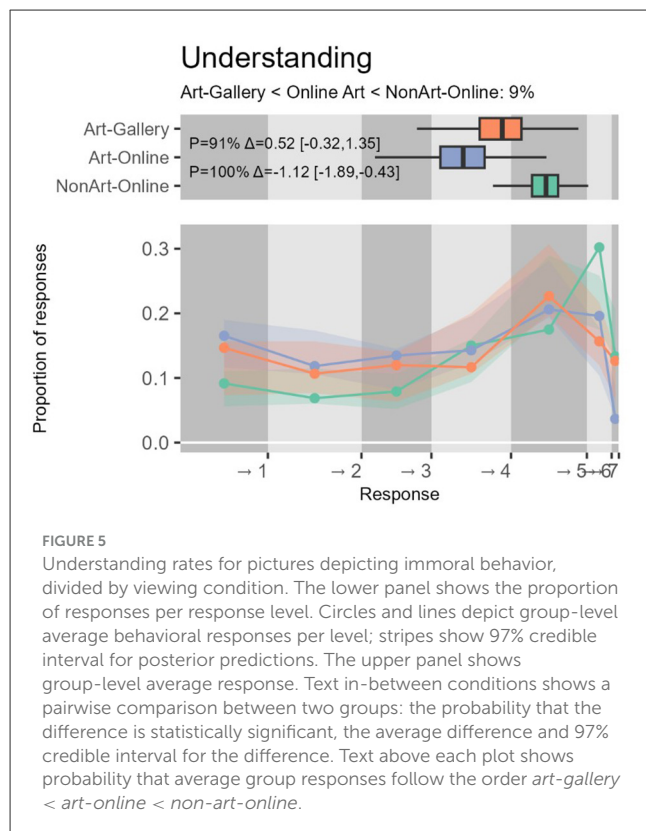
Discussion

The current study was inspired by a long history of artists engaging in immoral themes and ideas through their art. More

specifically, it addressed the phenomenon of Contemporary artists explicitly engaging in immoral behavior for the sake of creating artworks, but whose artworks are nevertheless appreciated, consumed and passed on. The study examined whether beholders are more likely to tolerate immoral acts when the actor is an artist rather than a non-artist “ordinary” person, and whether presenting such acts in a natural art settings stretches this effect even more. We presented the same set of 20 morally and immorally loaded pictures to participants in three experimental conditions: as art in a physical art gallery (*art-gallery*), as art in an online survey (*art-online*) and as non-art in an online survey (*non-art-online*). Participants evaluated the pictures on a variety of scales.

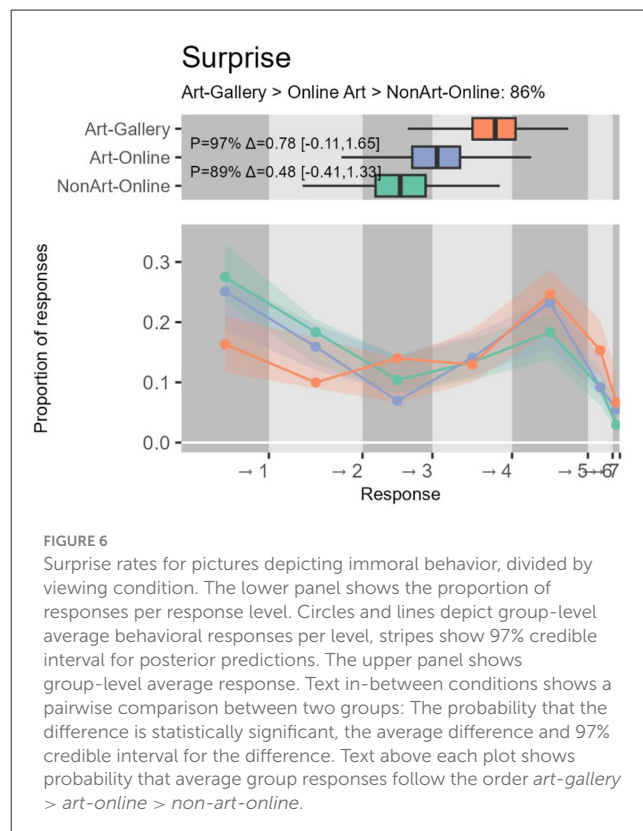
With regard to negative emotions, our hypotheses were not supported: no consistent differences were found between the groups for any of the analysed emotions. This lack of differences may confirm that the misery and horrors depicted in the pictures were evaluated as miserable and horrific in all experimental conditions, regardless of whether an artist or a non-artist person performed them, the immoral actions evoked negative emotions.

With regards to positive ratings (beauty, happiness, interest, hanging up) the results almost fully supported our hypotheses. For beauty and happiness, the predicted pattern was found in full:



art-gallery participants rated the pictures most highly, followed by *art-online* participants and *non-art-online* participants. In the case of interest and hanging up, *art-gallery* participants provided significantly higher ratings than the two online groups, but the online groups did not differ significantly. The latter results potentially point to a stronger effect of art context than art framing. That is, it may be that the main trigger for processing and evaluating artworks in a unique way is the fact that beholders encounter artworks in a physical setting (i.e., art gallery, museum, theatre, cinema, etc.) that signals and enables them to do so, rather than the status of these pictures as art.

However, it should be noted that individual differences between the groups, and especially the higher interest in art among Gallery participants, could drive this effect, as people who are more interested in art may naturally be more likely to rate artworks as more beautiful, interesting, etc. On the other hand, those who are interested in and are more regularly exposed to art may be more critical and provide lower beauty, happiness, interest and hanging up. Overall, it is worth noting that the current study was inspired by a real-world question: why are artworks with immoral value accepted and celebrated by the art world? Our results suggest that those who are relatively interested in art and evaluate immoral acts as art in an art context—who represent the population in this real-world effect—find the final product more beautiful, interesting, feel greater happiness and are more willing to hang the pictures up in their home. Hence, the results may partly explain the acceptance of such artworks. What our results cannot do is fully disentangle the effect of art interest (beholder variable) from art setting (context variable), and we hope that future research will do so.



Understanding results confirmed our predictions too, with higher understanding rates in the non-art condition compared to the two art conditions. One explanation for these results may be that people tend to believe that art carries significant and abstract meanings; thus, they are more likely to question their own understanding when they engage with art (Goetz and Carbon, 2024; Muth et al., 2015). In the context of our study, it may be that in the *non-art* condition, participants could easily identify the reason for the wrongdoing, for instance, an individual perceived as cruel or antisocial. By contrast, it seems that the *art* participants were less likely to use everyday life heuristics and predefined moral criteria to determine the reason for the wrongdoing, which resulted in lower understanding rates. Unpredictably, understanding rates were higher in the *art-gallery* than the *art-online* condition, perhaps due to overall more intensive and stimulating cognitive experience, also reflected in the higher interest and surprise rates. Again, this may be explained by the higher art interest in the Gallery group rather than purely by the gallery context. As for surprise, the higher rates among the *art* groups compared to the *non-art* group may suggest that participants generally did not expect to view unethical actions taking place in the context of art. This increase in surprise can also explain the decrease in understanding in the art groups.

In summary, the results suggest that the experience of negative emotions is not attenuated in the context of art, but beholders nonetheless evaluate the stimuli more positively. Thus, although these results partly diverge from our hypotheses, they are in line with previous studies, which reported a difference in the evaluation of negative stimuli, only for positive ratings (Gerger et al., 2014; Wagner et al., 2016, 2014). The studies also support the notion

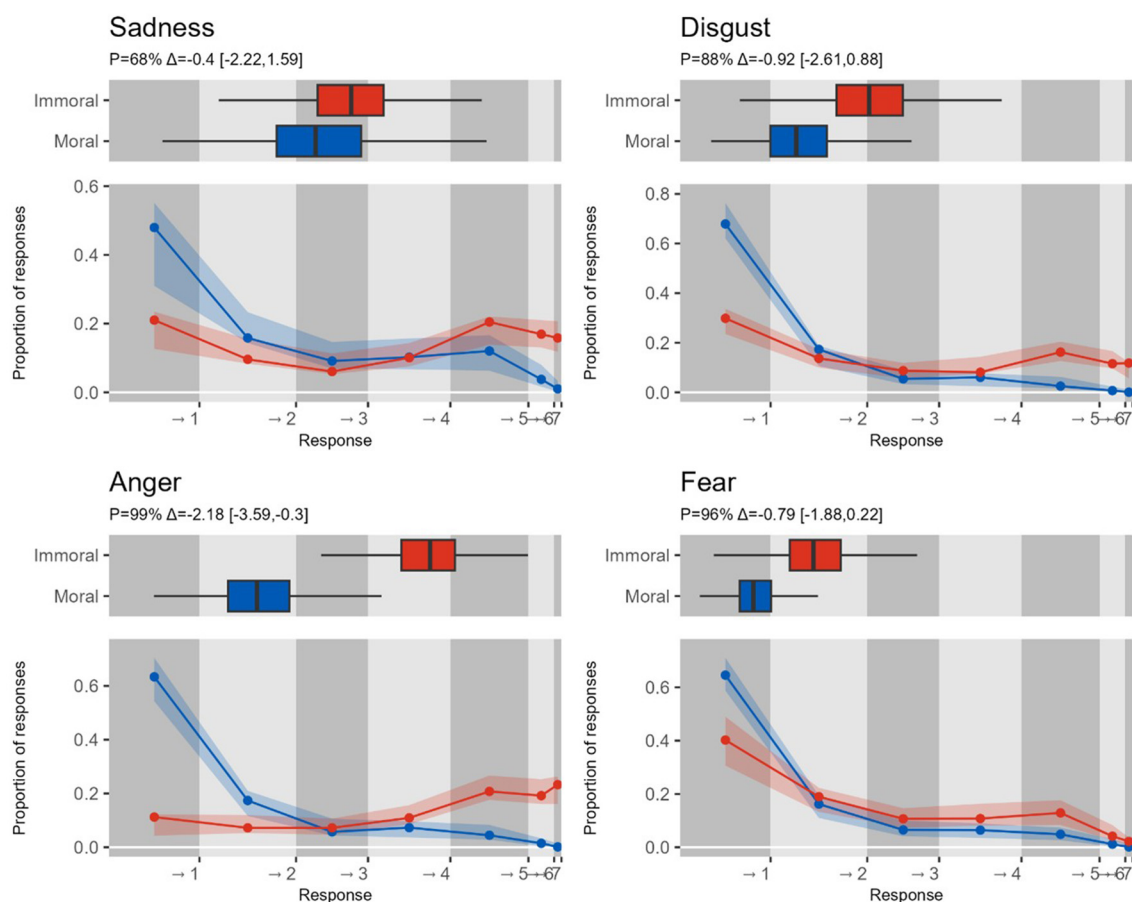


FIGURE 7

Negative emotional reaction to pictures depicting immoral vs. moral behavior. The lower panel in each plot shows the proportion of responses per response level. Circles and lines depict group-level average behavioral responses per level, stripes show 97% credible interval for posterior predictions. The upper panel in each plot shows group-level average response. Text above each plot shows a pairwise comparison between two kinds of images: The probability that the difference is statistically significant, the average difference (moral – immoral) and 97% credible interval for the difference.

(Menninghaus et al., 2017, 2019) and previous findings (Wagner et al., 2014) that art experiences promote more robust overall affective experiences.

Our question was situated between two theoretical accounts. On the one hand, the distancing-embracing model (Menninghaus et al., 2017) posits that the art context influences the appraisal of negative emotions, enabling viewers to embrace these emotions and evaluate the artwork more positively. However, to our knowledge, support for this model has so far come mostly from evaluations of fictional artworks, and never from artworks that involve harmful or immoral behavior. On the other hand, Feelings as Information Theory (FAIT) (Clore and Huntsinger, 2007) argues that feelings and emotions toward a specific object guide the cognitive evaluation of it, including aesthetic evaluation. However, FAIT is not an art-specific theory, and therefore, it may not account for the special conditions offered by art.

In the current study, participants reported similar levels of negative emotions elicited by the pictures, however relative to the *non-art* condition, in the two *art* conditions the pictures were evaluated more positively, suggesting that *negative emotions guided evaluations to a lesser degree in the processing of art*. Therefore, the results extend the distancing-embracing model to the realms

of immorally loaded art and of non-fictional art. They suggest that even if, for the sake of creating an artwork, an artist clearly harms animals, human beings, or the environment, beholders are able to form a certain distance from the artifacts. As a result, beholders may evaluate the artworks more positively compared to when they evaluate the same non-art everyday photographs. For FAIT, our results suggest that feelings and emotions may guide cognitive evaluations to different extents in different situations, particularly in the realm of art. At the same time, it should be noted that participants experienced higher happiness levels in the two *art* conditions, and it may be that happiness also guided subsequent evaluations.

Another explanation may lie in the FAIT's principle, that emotions affect not only evaluations but also processing styles (Clore and Huntsinger, 2007). According to FAIT, when one experiences negative emotions, one evaluates stimuli more locally and referentially, whereas the experience of positive emotions promotes global, relational, and heuristics-based processing (Clore and Huntsinger, 2007). However, as levels of negative emotions did not differ between the groups, this explanation may not suffice. Future research may disentangle these effects.

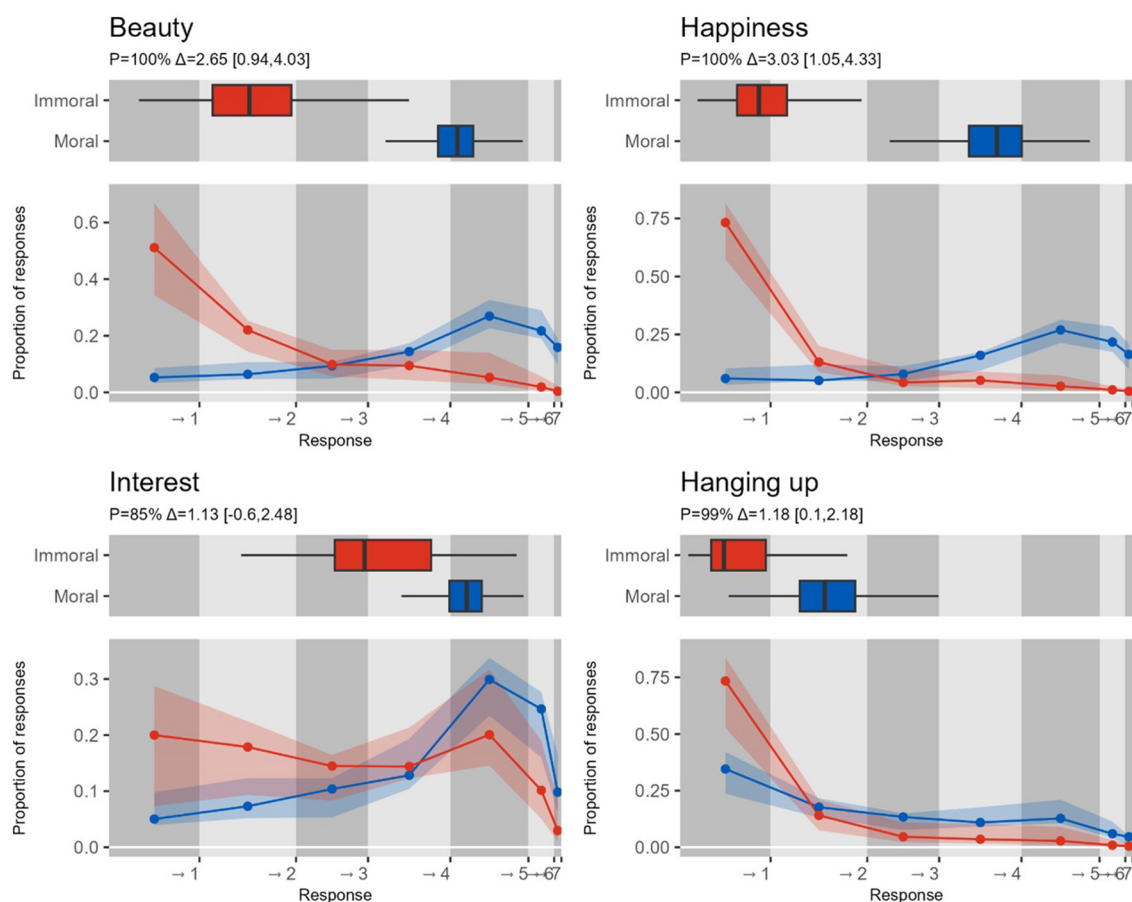


FIGURE 8

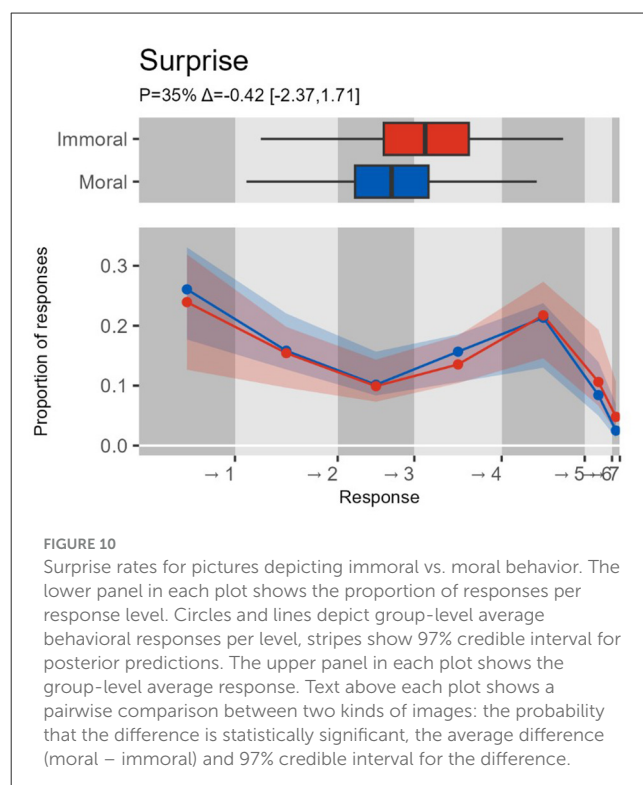
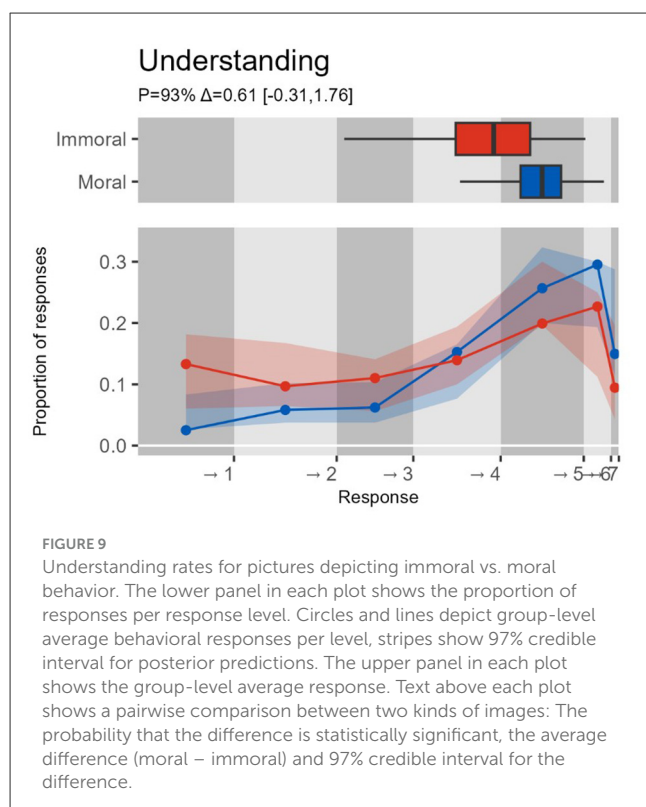
Positive ratings of pictures depicting immoral vs. moral behavior. The lower panel in each plot shows the proportion of responses per response level. Circles and lines depict group-level average behavioral responses per level, stripes show 97% credible interval for posterior predictions. The upper panel in each plot shows the group-level average response. Text above each plot shows a pairwise comparison between two kinds of images: The probability that the difference is statistically significant, the average difference (moral – immoral) and 97% credible interval for the difference.

Importantly, the results also align with accounts claiming that during the interaction with art people enter an art-specific mode which distorts daily cognitive and emotional processing (Arai and Kawabata, 2016; Bullough, 1912; Cupchik et al., 2009; Goetz and Carbon, 2024; Haertel and Carbon, 2014; Kant, 1790/1951; Kirk et al., 2009; Muth et al., 2017; Rabb et al., 2016; Shaftesbury, 1671–1713/1964; Spence, 2020; Stolnitz, 1978; Van Dongen et al., 2016). The results also support the view that art context contributes greatly to this effect (Brieber et al., 2015; Muth et al., 2017), however, due to the reported differences in art interest in our study, they should be interpreted cautiously.

Adopting an art mode of processing may additionally distort the process of intention attribution, whereby the brain automatically attributes intentions to perceived actions performed by other people, based on the common intentional set of the perceiving individual (Blakemore and Decety, 2001). This process may be distorted when the perceived action is performed by an artist, as due to the cultural significance of art (Benjamin, 1936/2018; Goetz and Carbon, 2024; Marcuse, 1979, 2007; Smith, 2014a; Smith and Smith, 2001) individuals may assume that artists act out of intentions different from their own. Hence, the artist's intentions may be debated and reiterated rather

than determined automatically, and subsequently, the moral evaluation of the actions might differ. However, this is a speculative mechanism that was not tested directly and needs to be addressed empirically.

Our study has several limitations. First and foremost, as discussed above, it may be argued that the differences between the *art-gallery* and the two online conditions could partly be explained by the higher art interest rates among the *art-gallery* group, which perhaps conceals further differences between the samples. While there is merit to such claims, it should be noted again that we explicitly recruited art enthusiasts for the gallery condition, with the aim to create settings that can most accurately reflect experiences and evaluations of museums and gallery goers, who seem to tolerate artworks with ethical deficits. This includes the physical gallery context, but also the motivations, interests, expectations and previous knowledge of visitors. Regular museum visitors may also be more experienced in adopting an art-specific mode that may affect artistic moral evaluations significantly (Goetz and Carbon, 2024; Nanay, 2015). Additionally, the *art-online* group evaluated the immoral behavior more favourably than the *non-art-online* group, although the groups did not differ in their interest in art; hence, we may speculate that the observed context effect



in the *art-gallery* group is a natural continuation of this framing effect observed between the two online groups. Lastly, the three experimental groups did not differ greatly demographically; all mainly consisted of students and had similar mean ages.

Additionally, a social-functionalist approach to moral emotions proclaims that different moral emotions (especially disgust, anger, and contempt) have different functions and are therefore felt in response to different moral violations. For example, anger is felt toward behaviors threatening the self, and disgust is typically felt toward acts violating chastity or purity) (Hutcherson and Gross, 2011). Nevertheless, in the current study, we did not target specific moral emotions by presenting scenarios that explicitly violate specific norms, which may provide another potential explanation for the lack of significant differences in these emotions and provide an avenue for future research.

The non-dissimilar negative emotional rates acquired in the two *art* conditions relative to the *non-art* condition may result from various other limitations. First, while the examples of popular artworks with ethical deficits discussed in the introduction focused on installations, sculptures, and performances by famous artists presented in world-renowned institutions, our study comprised rather modest photographs created by undistinguished artists (due to their anonymity), presented in a small, upcoming gallery. While no gallery visitors questioned the existence of any of the artists (relatively anonymous artists are often exhibited in group shows in entry-level galleries), it may be that more visually impressive artworks created by more established artists or art contexts would have led to attenuated negative emotional reactions. When art with immoral value is presented in established institutions and by well-known artists, it may be perceived as possessing, among others, higher artistic, aesthetics, cultural and financial value, which

may act as confirmation of the behavior to beholders. Second, our sample also consisted mostly of females, who tend to be less ethically permissive than males (Pan and Sparks, 2012). At the same time, the sample was younger than typical museum visitors, and ethical permissiveness tends to reduce with age (Pan and Sparks, 2012). Lastly, it should also be noted that our study employed one specific medium of visual art, namely photography, and future research might extend the results by addressing other media such as painting, sculpture and film, or non-visual art such as music or poetry.

Theoretical implications—Moralism, Autonomism, and Immoralism

To broaden our discussion, we would like to consider the results in relation to various conceptualisations of the relationship between ethics and aesthetics, or morality and art; namely, Moralism, Autonomism, and Immoralism. Moralism stems from Plato's strong views expressed in the Republic (ca 375 BCE/1968) (Bloom and Kirsch, 1968), that art must be moral. Currently, Moralism is understood as the view that moral and aesthetic judgments are dependent (Carroll, 2000). That is, if one finds ethical defects or virtues in a work of art, one should also find aesthetic defects or virtues in it (Clavel-Vazquez, 2018). While Moralism entails that every moral defect or virtue in an artwork is automatically an aesthetic defect or virtue, Moderate Moralism is the view that moral judgments can affect aesthetic judgments, but not every ethical defect or virtue is necessarily an aesthetic defect or virtue (Carroll, 2000).

By direct contrast, Autonomism is the view that moral and aesthetic values are independent (parallel but slightly different approaches to Autonomism are Art for art's sake, Aestheticism and Formalism) (Carroll, 2000). Radical Autonomism holds that artworks have no intrinsic moral value and thus cannot be assessed ethically, while Moderate Autonomism is the view that artworks can be assessed ethically, but ethical value judgments never affect aesthetic value judgments (Clavel-Vazquez, 2018). That is, one can find ethical flaws or virtues in an artwork, but these never affect one's aesthetic evaluation of the artwork (Clavel-Vazquez, 2018).

Lastly, Immoralism (also termed contextualism) entails that moral and aesthetic judgments are dependent, but not in the symmetrical way Moralism entails they are (Liao and Meskin, 2018). An artwork's moral defect can translate into either an aesthetic flaw or a virtue and the same holds for aesthetic virtues (Liao and Meskin, 2018). For example, one may claim that Stanley Kubrick's *A Clockwork Orange* (1971) is a masterpiece not despite its immoral content, but because the film succeeds in depicting immoral content in an aesthetically pleasing manner.

Mapping the current study's results onto a single conceptualisation may prove challenging. The study supports the claim of Moralism, Moderate Moralism, Moderate Autonomism and Immoralism, that an artwork can be assessed morally. Even when judged as art, the immorally loaded pictures were clearly evaluated less favorably than the moral pictures, strongly suggesting that their immoral value influenced their aesthetic value. At the same time, aesthetically, participants evaluated the same immoral behavior more favorably in the context of art. This supports the Autonomist view that artworks do not abide by the same moral assessment that other phenomena are subject to.

One possibility is that aesthetic and ethical judgments are dependent (i.e., not autonomous as Autonomism suggests), but not in the way Moralism argues they are. That is, moral and aesthetic evaluations are not dependent in the sense that beholders apply predetermined moral criteria to aesthetic evaluations, but in the sense that evaluating actions as art reorients beholders' moral evaluations. This is because people may enter an art-specific mode when they engage with art (Goetz and Carbon, 2024; Hanich et al., 2014; Menninghaus et al., 2017; Muth et al., 2017; Wagner et al., 2014), which de-automatises default processing and broadens the frame of ethical evaluation.

For example, people may postpone their otherwise immediate ethical assessment, explore their emotional reaction to the artwork, generate possible interpretations of the artwork, link the artwork to their own personal experience, explore potential messages the artists wished to convey, etc. By contrast, in daily life, people tend to process information automatically and with minimal thoughts involved (Bargh and Ferguson, 2000), hence, they are likely to dogmatically classify immoral behavior as unethical and devote no further thought to it.

This view aligns with Dewey (1934/2005), who opposed both Moralism and Autonomism. Dewey (1934/2005) accused Moralism of assuming that moral norms are externally set and only responded to by artists. He also criticised autonomism for viewing art as fully detached from daily life and thus rendering it esoteric. According to Dewey (1934/2005), art plays a vital role, in fact, the most vital role, in questioning, challenging and eventually shaping moral values. This is because both art creation and processing offer an experience that engages people's perception, reasoning, emotions,

and most importantly, imagination, as one complete and full gestalt. This is in contrast to most daily activities, which are not considered experiences because they are either practical (and thus composed of disconnected, incomplete parts) or purely intellectual (and therefore do not involve interaction between a living being and its environment).

For Dewey (1934/2005), art, as a practice, originated in the most whole form of experience on the side of the artist and the beholder, and is the purest form of communication. As such, it does not abide by predefined norms and ideals, nor does it strictly prescribe moral norms (hence we may reject Moralism). At the same time, art is not independent of society and therefore of moral concerns altogether (hence we may reject Autonomism). Rather, art offers an opportunity to discuss, challenge and shape moral norms: "Hence, it is that art is more moral than moralities... (art's) indifference to praise and blame because of preoccupation with imaginative experience constitutes the heart of the moral potency of art. From it proceeds the liberating and uniting power of art" (Dewey, 1934/2005, pp. 362–363).

Although our results may shed light on a "dark side" of art, we believe that they also highlight this pivotal role of art in generating debate and challenging social norms that Dewey describes. In its multileveledness (Kreitler and Kreitler, 1972) open-endedness and ambiguity (Muth et al., 2017), art encourages and even forces beholders to question their pre-conceptions, postpone judgments, and think critically and independently about given matters. Art provides people the invaluable opportunity to exchange ideas under unconventional, non-judgmental, and morally indeterminate conditions.

Perhaps we can even argue that, due to the centrality of art in shaping ideals and expanding subjectivities, art is essential for the moral and ethical development of our society or any given society. Art arises from specific cultural and political conditions, and the nature of experience it offers enables it to influence them and reshape these conditions (Dewey, 1934/2005). Marcuse (1979) termed this process *aesthetic sublimation*, but he also warned that the potential for aesthetic sublimation renders art intimidating and inaccessible to many people. Therefore, one challenge for the art world is to democratise art, so that art can allow people to participate and instantiate healthy, critical, and multi-levelled discussions.

Conclusion

As artists seek to create debate and generate controversies through art, some contemporary artists incline toward engaging in truly unethical behavior. This contrasts with artists in the past who shocked their audience by representing (questionably) immoral content but did not engage in actual immoral behavior. Inspired by art institutions' general acceptance of artworks created through engaging in borderline behavior, we examined whether beholders accept immoral behavior more readily when it is labelled art, and whether presenting art in natural art settings (art gallery) intensifies this effect.

We found that both labeling immoral behavior art and presenting it in an art gallery as art do not attenuate the negative emotional reaction to the behavior. However, when labeled art, the behavior was evaluated more positively (i.e., beholders felt greater

happiness and rated the pictures as more beautiful). When the behavior was presented as art in an art gallery, beholders evaluated it even more positively (i.e., felt greater happiness, rated the pictures as more beautiful and interesting, and indicated a higher likelihood of hanging them up at home). In both art conditions, participants also rated the behavior as less well understood and more surprising.

We propose that beholders may evaluate immoral behavior more positively in the context of art because they adopt art-specific attention when approaching stimuli as art. This attention de-automatises default processing, even toward non-fictional immoral behavior. As art-specific attention is more “effective” in art-specific contexts, immoral behavior was evaluated even more positively in the physical gallery exhibition.

Art potentially plays a vital role in changing and widening general mindsets, moral attributions and evaluating societal important value systems. This makes art, on the one hand, susceptible to the promotion of otherwise unacceptable behavior and ideas, but on the other hand, outstandingly valuable from a socio-cultural (and not only an aesthetic) standpoint.

Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found below: https://osf.io/zf476/?view_only=7f6a179a26664e5ba3ac094e9a6a7991.

Ethics statement

The studies involving humans were approved by University of Bamberg Ethics Committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

IG: Validation, Project administration, Conceptualization, Methodology, Data curation, Writing – review & editing, Investigation, Writing – original draft. LB: Methodology, Conceptualization, Investigation, Data curation, Writing – review & editing. FK: Writing – review & editing, Methodology, Conceptualization, Investigation. AP: Software, Data curation, Writing – review & editing, Formal analysis. C-CC: Validation, Conceptualization, Project administration, Methodology, Writing – review & editing, Supervision, Investigation, Writing – original draft.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fcomm.2025.1655343/full#supplementary-material>

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