Event Structure and the Experience of Viewing Art

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Abstract

Future theories of cognition need to encompass a wide range of human experiences, beyond those typically assessed in the laboratory. This study assessed how the experience of a prior artwork (prime) influenced the experience of the next artwork (target), and how this influence was affected by the presence or absence of event boundaries in a VR environment. We found that when primes were more emotionally intense, targets were rated lower in liking/beauty and emotional intensity. This influence was attenuated when the paintings were separated by an event boundary (separate rooms). Surprisingly, there was an effect of event boundaries on the processing of the prime paintings. An evaluation of additional data suggests that this is due to the mere presence of another painting in the same room, even before it is actually viewed. Thus, event structure can meaningfully impact the experience of viewing art.

Keywords: context; priming; involuntary autobiographical memory; cognitive aesthetics

Introduction

The current study explored whether the experience of one artwork can influence the experience of the next, and the degree to which this is influenced by event structure - whether the paintings were part of the same or different events. Although we do not explore it in depth here, we also manipulated whether paintings were of secular or sacred subjects with an eye toward assessing how personal attitudes may influence these processes.

Experience and Context

The majority of cognitive research has focused on more mundane materials, often far from everyday experience, such as testing memory for lists of words. That said, there have been studies of the cognitive processes involved in the perception (Crozier & Chapman, 1984), appreciation (Lindell & Mueller, 2011), and memory of art (Yago & Ishai, 2006). Art is of intrinsic interest for cognitive science because it is inherently important to human experience given how much it is displayed, and the high costs it can sometimes command.

Different pieces of art elicit different reactions. Of concern here is the idea that some artworks are more likely to affect a person than others. Most assessments have presented artworks as decontextualized items on a list, following the Ebbinghaus (1885) verbal learning tradition. However, this is typically not how art is experienced in the real world.

Instead, art is experienced in a context. Prior work shows that context can influence the experience and memory of that art. For example, when the temporal context (time of year) is consistent with the subject matter of art, we are more likely to remember the artwork (Dageforde et al., 2024). Also, when we encounter art in unexpected spatial contexts (e.g., religious art in an office rather than a chapel), we are more likely to have involuntary autobiographical memories. That said, such memories are more likely to be stronger in a spatially congruent context (Parra et al., in preparation). Thus, our experience with a work of art becomes more deeply personal when it triggers the retrieval of our individual memories. One of our aims here was to assess how the context of a preceding artwork may influence the processing of a currently viewed artwork, including the involuntary retrieval of autobiographical memories.

Event Cognition

Event structure can have meaningful impacts on cognition (Radvansky & Zacks, 2014). According to the Event Horizon Model (Radvansky, 2012), we identify and use event boundaries to help us parse our otherwise continuous experiences. One way that this may happen is when there is a transition from one spatial location to another, as suggested by the Event Indexing Model (Zwaan & Radvansky, 1998). In general, multiple items experienced in one location are treated as being part of a single event compared to those that are in different locations (e.g., Zwaan et al., 1995).

One part of the Event Horizon Model is the idea that when action moves from one event to the next, information in the current event model is at a heightened level of accessibility, whereas information from prior events is at lower levels. More generally, cognitive influences have a greater impact within an event than across events (e.g., Ezzyat & Davachi, 2011; Pettijohn & Radvansky, 2016; Zwaan, 1996). That is, event boundaries parse up our experience and help determine how information processed at one time influences the processing of what follows. With respect to the specific experience of viewing art, the Event Horizon Model predicts that processing of one painting is more likely to be influenced by the experience of the just preceding one if they are in the same event (room) than if they are in different events.

Involuntary Autobiographical Memories

While memory retrieval sometimes needs time and effort, there are also occasions when autobiographical memories are retrieved spontaneously and involuntarily (Berntsen, 1996; 2001; 2010). For example, while walking to class in the rain you see a puddle. This effortlessly brings to mind a memory of when you were walking home from kindergarten and saw a puddle on the sidewalk with the sky reflected in it. It looked like the puddle had depth and was a window to another world. Involuntary memories occur regularly (Berntsen & Rubin, 2008), many times a day. They are a basic mode of memory (Berntsen, 2010; Ebbinghaus, 1885), and are often triggered by aspects of current experience (Berntsen et al., 2013).

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We expected that viewing paintings would trigger such memories. This would be a deeply personal part of the viewing experience. That is, the experience is not only about the painting itself, and the context it is in, but also how it affects the viewer. Thus, this includes both affective and interpretive reactions of the painting itself, as well as how it affects a person by spontaneously and involuntarily bringing to mind prior autobiographical memories.

Experiment 1

The aim of Experiment 1 was to assess whether viewing one painting (the prime) serves as a context to influence the processing of the next one (the target). Prime paintings were varied in terms of their emotional intensity and their semantic reference. We were also interested in whether any such influence would be affected by the presence or absence of event boundaries between the two paintings. Event boundaries were manipulated by having people shift from one room to another (*Shift Condition*), or not (*No Shift Condition*), in a virtual environment.

Method

Participants. We tested 201 participants (106 female, 91 male, & 4 nonbinary) who were recruited on Prolific. These people ranged in age from 18 to 69 years (M = 34.7; SE = 0.82) and were paid $9 for their participation.

Materials. The materials were 24 images of paintings that we found using an internet search. These paintings were selected from the results of a norming study. For the norming study, an on-line Prolific sample of 262 people was asked to rate a series of 60 paintings on three variables: 1) liking/beauty, 2) emotional engagement, and 3) whether they elicited any involuntary autobiographical memories. Each person in the norming study viewed and rated 20 of the 60 paintings. On each trial, they viewed a painting along with a brief title presented below it. After a brief delay, they were asked to indicate "How much do you like the artwork? That is, how beautiful do you think it is?" on a 0 to 9 scale, with 0 labelled as "Not at all" and 9 as "Very Beautiful", to indicate "How emotionally intense is the artwork?" on a 0 to 9 scale, with 0 labelled as "Low" and 9 as "High", and to indicate "Were you spontaneously reminded of a personal event from your life by the artwork?" by responding "yes" or "no". All of the paintings were representational (not abstract). We selected images of representational paintings given that most of our participants are likely to not be art experts. Nonexperts often find it easier to process representational over abstract images (Bimler et al., 2019). Each person saw the paintings in a different random order.

To select the paintings for the current study, we focused on the emotional intensity ratings. We wanted to identify what we thought of as more or less "exciting" paintings. These were operationalized as those that scored high or low in emotional intensity. Moreover, in line with our spatial context manipulation, half of the paintings that we selected had subjects that were secular (e.g., horse race, Hamlet, and moon landing) and half were sacred (e.g., birth of Christ, holy family, and massacre of the innocents). For the high intensity paintings, we chose the 4 secular and 4 sacred paintings that had the highest emotional intensity ratings (see Table 1). For the low intensity paintings, we selected 24 secular paintings that had the lowest scores. All of the high intensity paintings were used as primes. However, for the low intensity paintings, 8 were selected as primes (4 secular and 4 sacred). The remaining 8 paintings served as targets. In other words, a target painting (always low/secular) was preceded by a (a) high secular, (b) high sacred, (c) low secular, or (d) low sacred prime. Thus, the study was a 2 (Prime Intensity) x 2 (Prime Painting Type) repeated measures design. The average responses in this norming study are shown in Table 1. A list of the paintings used in this study is provided in an on-line supplement at https://osf.io/syfek/.

Table 1. Ratings of paintings from norming

Painting Type	Liking/ Beauty	Emotional Intensity	Involuntary Memories
High sacred	4.44	5.99	0.15
High secular	5.29	6.05	0.30
Low sacred	3.00	2.18	0.06
Low secular	4.81	3.75	0.16
Low targets	4.81	3.26	0.14

The virtual environment was created using the Unity software. A screenshot is given in Figure 1. This environment had 8 large rooms which could hold up to two paintings (used in the No Shift condition) and 16 small rooms which could only hold a single painting (used in the Shift condition). The assignment of paintings to rooms was semi-randomized in the following way. First, the targets were randomly assigned to paintings of the four prime types. Then, these prime-target pairs were randomly assigned to rooms within the virtual environment. The first two rooms were set aside as practice to familiarize participants with the procedure. The No Shift pairs were randomly assigned to 4 of the 8 larger rooms. The Shift pairs were assigned to randomly selected pairs of adjoining rooms. The remaining rooms had no paintings. Thus, the set of painting pairings, and their locations in the virtual environment were unique for each participant.

Figure 1. Screen shot of the virtual environment.

Procedure. People navigated the virtual environment using their own desktop computers. The task was to move from one painting to the next, and from one room to the next. When people entered a target zone in the environment, the program centered them on the painting. People first viewed the painting for 4 seconds. After this, three rating prompts appeared regarding liking/beauty, emotional intensity, and involuntary autobiographical memories.

We also gathered additional demographic information about our participants, namely, their religion and religiosity using the Centrality of Religiosity Scale (Huber & Huber, 2012), and interest in art using the Desire for Aesthetics Scale (Lundy et al., 2010). This information will be used in subsequent, more detailed analyses of individual differences that are beyond the scope of the current paper.

Results

The overall ratings for the different painting types are shown in Table 2. Importantly, the low intensity paintings scored lower than the high intensity paintings on Emotional Intensity, just as they were identified and categorized in the norming study. We first considered the ratings to the prime images. After this, we assessed the effect of the primes on the target images. For each analysis, the data for the Liking/Beauty, Emotional Intensity, and Involuntary Memory responses were each submitted to 2 (Art Type: Sacred vs. Secular) X 2 (Intensity: High vs. Low) X 2 (Shift) repeated measures ANOVAs.

Table 2. Ratings of paintings in Experiment 1

Painting Type	Liking/ Beauty	Emotional Intensity	Involuntary Memories
High sacred	4.95	6.50	0.21
High secular	5.54	6.44	0.33
Low sacred	4.64	3.81	0.17
Low secular	5.40	4.05	0.21
Low targets	5.47	4.26	0.27

Primes. For the prime images, in terms of the ***Liking/Beauty*** ratings, there was a main effect of Art Type, $F(1,200) = 30.09$, $p < .001$, $\eta_p^2 = .13$. People rated secular paintings as better liked/more beautiful ($M = 5.47$; $SE = .09$) than sacred paintings ($M = 4.80$; $SE = .10$). There was also a main effect of Intensity, $F(1,200) = 4.66$, $p = .03$, $\eta_p^2 = .02$, with people rating high intensity paintings as better liked/more beautiful ($M = 5.24$; $SE = .10$) than low intensity paintings ($M = 5.02$; $SE = .09$). Finally, there was a main effect of Shift, $F(1,200) = 4.10$, $p = .04$, $\eta_p^2 = .02$, with people rating paintings as better liked/more beautiful in the Shift condition (a small room, without another painting present) ($M = 5.04$; $SE = .09$), than the No Shift condition (a large room with another painting visible along the wall) ($M = 4.72$; $SE = .09$). None of the interactions were significant, all Fs < 1.86, all ps > .10.

For the ***Emotional Intensity*** ratings, only the main effect of Intensity was significant, $F(1,200) = 479.06$, $p < .001$, $\eta_p^2 = .71$, with high intensity paintings given a higher rating ($M = 6.47$; $SE = .08$) than low intensity paintings ($M = 3.93$; $SE = .09$), in line with the norming study and the classification.

For the ***Involuntary Autobiographical Memories***, there was a main effect of Art Type, $F(1,200) = 12.23$, $p < .001$, $\eta_p^2 = .06$, with involuntary memories being more likely with secular ($M = .27$; $SE = .02$) than sacred paintings ($M = .19$; $SE = .01$). This may be because these paintings touched on subjects that people may have had more experience with, such as the 9/11 terrorist attack. There was also a main effect of Intensity, $F(1,200) = 23.36$, $p < .001$, $\eta_p^2 = .11$, with involuntary memories being more likely with high ($M = .27$; $SE = .02$) than low intensity paintings ($M = .19$; $SE = .01$). Finally, there was an Art Type x Intensity interaction, $F(1,200) = 4.57$, $p = .03$, $\eta_p^2 = .02$.

Analyzing the art types separately, there was an effect of Intensity for our secular paintings, $F(1,200) = 21.53$, $p < .001$, $\eta_p^2 = .10$, with people reporting more involuntary memories for high ($M = .33$; $SE = .02$) than low intensity images ($M = .21$; $SE = .02$). In comparison, for our sacred paintings, Intensity was only marginally significant, $F(1,200) = 3.42$, $p = .07$, $\eta_p^2 = .02$, with people reporting more involuntary memories for high ($M = .21$; $SE = .02$) than low intensity images ($M = .17$; $SE = .02$), although to a smaller degree. That said, when only sacred paintings were considered, there was an interaction, $F(1,200) = 4.33$, $p = .04$, $\eta_p^2 = .02$. Simple effects tests revealed that for the low intensity paintings, there was no effect of Shift, $F < 1$, but for the high intensity paintings, involuntary memories were more likely in the Shift ($M = .25$; $SE = .03$), than the No Shift condition ($M = .17$; $SE = .03$), $F(1,200) = 8.09$, $p = .005$, $\eta_p^2 = .04$.

Overall, the analysis of the prime images supports the idea that there are meaningful differences between our image types. Specifically, our high intensity images were rated as better liked/more beautiful, more emotionally intense, and were more likely to elicit involuntary autobiographical memories than our low intensity images. Moreover, our paintings of secular subjects were rated as better liked/more beautiful and were more likely to elicit involuntary memories than our paintings of sacred subjects. Thus, these differences in how the primes are processed allows for the possibility of them having different effects on the target images.

Interestingly, there were differences in the Shift factor on the prime paintings that was unexpected given that the shift from one room to another (or not) had not yet happened. We found that people gave higher liking/beauty ratings to paintings in the Shift condition, and were more likely to have involuntary autobiographical memories, particularly for our images of sacred subjects. So, for reasons that we do not yet understand, viewing a painting alone, with no other art in the room, can make it seem more beautiful, perhaps because this focuses attention more directly on the one image in some way. Moreover, when viewing a painting of a sacred subject, a personal memory of a past event was more likely elicited when it was viewed alone in a room.

Targets. For target paintings, for the ***Liking/Beauty*** ratings, there was a marginal effect of Intensity, $F(1,200) = 2.87$, $p = .09$, $\eta_p^2 = .014$, with liking/beauty ratings being higher when the primes were low ($M = 5.55$; $SE = .10$) than high intensity ($M = 5.39$; $SE = .10$). There was also an effect of Shift, $F(1,200) = 4.18$, $p = .04$, $\eta_p^2 = .021$, with people rating a target painting better liked/more beautiful in the Shift ($M = 5.57$; $SE = .09$) than the No Shift condition ($M = 5.37$; $SE = .09$). Importantly, there was a three-way interaction, shown in Figure 2, $F(1,200) = 6.28$, $p = .01$, $\eta_p^2 = .03$.

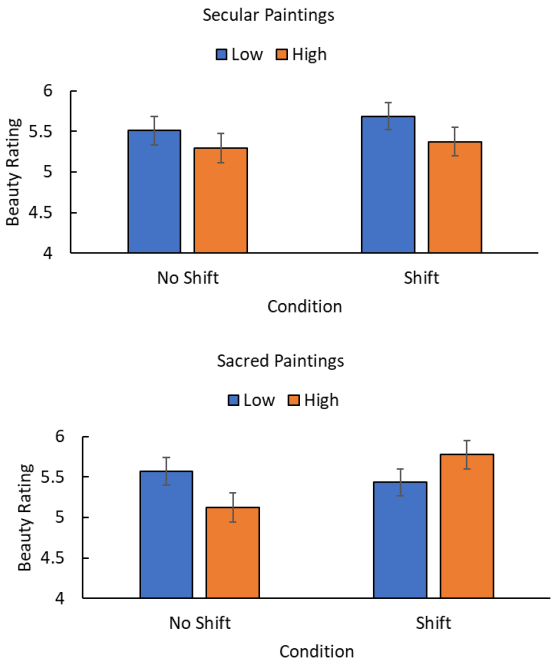

Figure 2. Beauty ratings for paintings

We broke this interaction down by analyzing the data separately based on whether the prime painting was secular or sacred. For the secular primes, there was a marginal effect of Intensity, $F(1,200) = 3.65$, $p = .06$, $\eta_p^2 = .018$, with beauty ratings higher with low ($M = 5.60$; $SE = .12$) than high intensity primes ($M = 5.33$; $SE = .13$). Neither the main effect of Shift nor the interaction was significant, both Fs < 1. Thus, for secular primes, only intensity influenced target painting processing, not whether they were part of the same or different events.

In contrast, when targets were preceded by a sacred prime, there was no effect of Intensity, $F < 1$, but the effect of Shift was marginal, $F(1,200) = 3.82$, $p = .05$, $\eta_p^2 = .019$, and, more importantly, the interaction was significant, $F(1,200) = 7.44$, $p = .007$, $\eta_p^2 = .036$. Simple effects tests revealed that when the primes were low intensity, there was no influence of Shift, $F < 1$. However, following high intensity primes, there was an effect of Shift, $F(1,200) = 10.62$, $p = .001$, $\eta_p^2 = .05$, with beauty ratings being lower in the No Shift ($M = 5.12$; $SE = .18$) than the Shift condition ($M = 5.78$; $SE = .17$). Thus, event structure influenced the experience of a target painting, but only when the prime was sacred, and had a higher emotional intensity. The experienced beauty of the target painting was lessened by having preceded it with a painting in the same space. However, walking through a doorway, and hence to a new event, allowed this negative influence to be tempered.

Turning to the ***Emotional Intensity*** ratings, there was only a marginal effect of Intensity, $F(1,200) = 3.59$, $p = .06$, $\eta_p^2 = .02$, with ratings being lower when the primes were high ($M = 4.16$; $SE = .11$) than low ($M = 4.36$; $SE = .11$). No other effects were significant, all Fs < 1.80, all ps > .10. Finally, for ***Involuntary Autobiographical Memories***, there were no significant effects, all Fs < 2.56, all ps > .10.

Discussion

From these data, we showed that the painting prior to the current one can influence performance. Specifically, if the prior (prime) painting was higher in emotional intensity, the following (target) painting was rated lower in liking/beauty and emotional intensity. That is, the target paintings suffered by being preceded by a more engaging piece of artwork.

We were also interested in whether this influence would be affected by event structure, and we did find an influence, although it was limited to beauty ratings. After a shift, liking/beauty ratings were higher, but this was confined to cases when the prime was high in emotional intensity and sacred.

An unexpected finding was that there were effects of Shift for both the primes and the targets. This suggests that there is something about the event structure that is having an influence on the processing of individual items, outside of the prime-target pairs. The cause for this is uncertain. There are two possibilities considered here. First, this influence may arise from simply considering the paintings a part of a separate event, broadly conceived. Second, this influence may arise from having a second painting visible (albeit from a distance) when the two paintings were in the same room, compared to having no other paintings visible if they were in the same room (See Figure 1). We examined this in Experiment 2.

Experiment 2

The aim of Experiment 2 was to assess whether the difference between the Shift and No Shift conditions in Experiment 1, particularly for the primes, was due to the presence of an event boundary or to the experience of having one or two paintings in a common room. To this end we considered some data gathered as part of an exploratory study that was completed prior to Experiment 1. Experiment 2 had a similar structure as Experiment 1 with the major difference being that, instead of navigating a virtual environment, paintings were presented in series on a computer screen with separate events being defined by a message that appeared between painting pairs. Thus, while there were still No Shift and Shift conditions, it was not possible to see the presence of a second painting in the Shift condition as occurred in Experiment 1.

Method

Participants. We tested 203 people (100 female, 102 male, & 1 nonbinary) that were recruited on Prolific. They ranged in age from 19 to 75 years of age (M = 38.1; SE = 0.99), and were paid $6 for their participation.

Materials and Procedure. The materials were 32 images of paintings. Sixteen of which were representational and 16 were abstract. Half of each of these were of secular subjects and half were of sacred subjects. These paintings were grouped into prime-target pairs. Each pairing involved either representational or abstract paintings, and not a mixture. There were 8 pairing versions of the study, so that each prime was paired with all 8 of the low intensity/secular targets.

On each trial, people viewed a painting along with a brief title shown below it. People were asked to rate the paintings on liking/beauty, emotional intensity, and involuntary memories, as in Experiment 1. Note that for the No Shift conditions, the paintings were presented either to the left or right of the display to emphasize the difference between them in the absence of an event boundary. However, for the Shift condition, they were presented in the middle of the display, which after several trials, could have served to cue viewers that a shift was coming. The order that the painting pairs were presented in was randomized for each participant.

The 16 painting pairs were presented as a series on the participants' own desktop computers using Qualtrics. Between each pair of paintings there was a large red rectangle with the phrase "New Painting Set" in large white letters in the center. For the No Shift pairs one painting followed another with a blank screen in between. The Shift pairs had the same structure except that the "New Painting Set" screen appeared between the prime and target image. Importantly, to have a more direct comparison with Experiment 1, only the data from the representational paintings are considered.

Results

We analyzed the data as in Experiment 1. The overall ratings for the painting types are shown in Table 3.

Table 3. Ratings of paintings in Experiment 2

Painting Type	Liking/ Beauty	Emotional Intensity	Involuntary Memories
High sacred	4.75	5.48	0.15
High secular	4.98	5.83	0.18
Low sacred	5.23	4.52	0.26
Low secular	5.28	4.76	0.24
Low targets	4.87	5.84	0.23

Primes. For the primes, in terms of the ***Liking/Beauty*** ratings, there was an effect of Intensity, $F(1,202) = 15.74$, $p < .001$, $\eta_p^2 = .07$, with liking/beauty ratings being higher when the painting was low intensity (M = 5.26; SE = .09) rather than high intensity (M = 4.86; SE = .09), consistent with the idea that these are separate dimensions of experience. There was no main effect of Shift, nor any interactions, all Fs < 1, all ps > .50.

For the ***Emotional Intensity*** ratings, there was an effect of Intensity, $F(1,202) = 84.87$, $p < .001$, $\eta_p^2 = .30$, with high intensity paintings given higher ratings (M = 5.65; SE = .09) than low intensity paintings (M = 4.64; SE = .09), in line with the classification. There was also an effect of Art Type, $F(1,202) = 10.02$, $p = .002$, $\eta_p^2 = .05$, with our secular paintings given higher ratings (M = 5.29; SE = .09) than our sacred paintings (M = 5.00; SE = .09). There was no main effect of Shift, nor any interactions involving this factor, all Fs < 1, all ps > .50.

Finally, for the ***Involuntary Autobiographical Memories***, there was only an effect of Intensity, $F(1,202) = 23.51$, $p < .001$, $\eta_p^2 = .10$, with involuntary memories being more likely with high (M = .25; SE = .02) than low intensity paintings (M = .17; SE = .01). There was a marginal effect of Shift, $F(1,202) = 3.83$, $p = .05$, $\eta_p^2 = .02$, with more involuntary autobiographical memories for the No shift (M = .22; SE = .01) than the Shift condition (M = .19; SE = .01). Shift did not interact with any other factors, all Fs < 1.2, all ps > .20. Thus, while we see an effect of Shift here, it is quite small.

Targets. For the target paintings, for the ***Liking/Beauty*** ratings, no effects were significant, including the main effect of Shift and any interactions involving it, all Fs $\leq$ 1.73, all ps > .10.

Turning to the ***Emotional Intensity*** ratings, there was a main effect of Art Type, $F(1,202) = 7.57$, $p = .006$, $\eta_p^2 = .04$, with ratings being higher when the primes were sacred (M = 5.97; SE = .08) than secular paintings (M = 5.71; SE = .09). No other effects were significant, including the main effect of Shift and any interactions involving it, all Fs $\leq$ 1.63, all ps > .20.

Finally, for ***Involuntary Autobiographical Memories***, there was an effect of Intensity, $F(1,202) = 10.92$, $p = .001$, $\eta_p^2 = .05$, with people having fewer involuntary autobiographical memories when the primes were low intensity (M = .19; SE = .01) than when they were high intensity (M = .25; SE = .02). Moreover, although the main effect of Shift was not significant, $F < 1$, there was a marginal Intensity x Shift interaction, $F(1,202) = 3.61$, $p = .06$, $\eta_p^2 = .01$. Although there were similar numbers of involuntary autobiographical memories for the high intensity primes when there was either a Shift (M = .25; SE = .02) or No Shift (M = .27; SE = .02), $F < 1$, there were more involuntary autobiographical memories for the low intensity primes when there was a Shift (M = .22; SE = .02) than when there was No Shift (M = .17; SE = .02), $F(1,202) = 2.97$, $p = .09$, $\eta_p^2 = .02$.

Discussion

Like Experiment 1, different artworks elicited different responses in people and the prime paintings had some influence on those paintings that came immediately afterward. Specifically, the emotional intensity of a prime

artwork had an influence on the occurrence of involuntary autobiographical memories for the target paintings.

Moreover, we again observed an influence of event structure on this priming, although in this case it was more confined to involuntary autobiographical memories. This was particularly true for our low intensity paintings.

Most importantly, in terms of the comparison with Experiment 1, while we saw an influence of event structure on the processing of the primes in Experiment 1, that was not evident in Experiment 2. Instead, any influence of event structure here was confined to the processing of the target paintings. Thus, some of the influence of the Shift-No Shift difference in Experiment 1 was due to the presence of a second painting in the room, even when that second painting had not been evaluated yet.

This may have occurred because when there are multiple items present in an environment that are to be processed, even when attention is focused on one in particular, the very presence of others can draw some attention away from the processing of the current item, thereby affecting the cognitive processes relevant to it.

Thus, in our Experiment 1, when people could see that there were two paintings in a room, even though their view of the second one was quite limited by the time they were viewing the prime painting, the processing of that prime was influenced. Specifically, they were liked less/seen as less beautiful, and were less likely to evoke an involuntary autobiographical memory.

In comparison, for Experiment 2, using a more decontextualized list-like format, the target painting was not seen at all until after viewing the prime. There was no preview opportunity. Thus, there was no major influence of event structure on the processing of the prime paintings.

In addition to the findings of interest, there were some findings that did not replicate across the two studies. In terms of the primes, while Experiment 1 reported an effect of Art Type on liking/beauty and involuntary autobiographical memories, this was not observed in Experiment 2. Although we cannot say for certain, this likely reflects a difference in materials which were normed prior to Experiment 1, but were not for Experiment 2.

In terms of the targets, the Intensity of the prime had an influence on the liking/beauty ratings of the targets in Experiment 1. However, this influence was not present in Experiment 2. For Experiment 2, the Art Type of the prime did have an influence, which was not present as a significant main effect in Experiment 1, but which was involved in an interaction. Although they affected different specific dimensions, in part because they were different items, in both cases there was an influence of the prime paintings on the experience of the subsequent target paintings. The precise reason for this between-experiment difference, however, is unclear.

General Discussion

Across two experiments, we found that the viewing of a prior painting (prime) could influence the experience of the following one (target). We also found that this could be influenced by the event structure. Moreover, we found that awareness of the presence of a second painting in the same room as the first had an influence on the processing of the first one, even though the view of the second painting was severely limited.

In terms of priming, as a reminder, while our primes varied in emotional intensity and subject matter (secular vs. sacred), our targets were always low emotional intensity secular paintings. We observed that a prime painting influenced the processing of a target painting in terms of its perceived likability/beauty and the experience of involuntary autobiographical memories, with greater intensity having a dampening effect on the processing of the target paintings.

In terms of event structure, we found that placing a target painting in a separate event from the prime could mitigate the effects of the primes on the targets. Thus, event structure can have a meaningful influence on processing, in this case the experience of an artwork.

Although unplanned, we also observed that the mere presence of a second painting in a room had an influence on the first painting that was viewed, even before there was any in-depth viewing of the second painting. When such a presence was not possible (Experiment 2), the effect of a shift on the processing of the primes was mitigated.

One final note; although we did collect individual difference data on our participants' religion, religious involvement, and interest in art, we were not able to present the results of those influences here. However, it should be noted that these factors did influence processing, with more religious people showing larger effects, particularly for our sacred paintings, further underscoring the impact of the context of a prime painting on the processing of the next artwork viewed.

Overall, these results demonstrate that the context of other items, and how these items are divided into different contexts by the event structure, can have meaningful impacts on cognition. In other words, our experience of art is influenced by how it is encountered, whether alone or in an event with other pieces.

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