



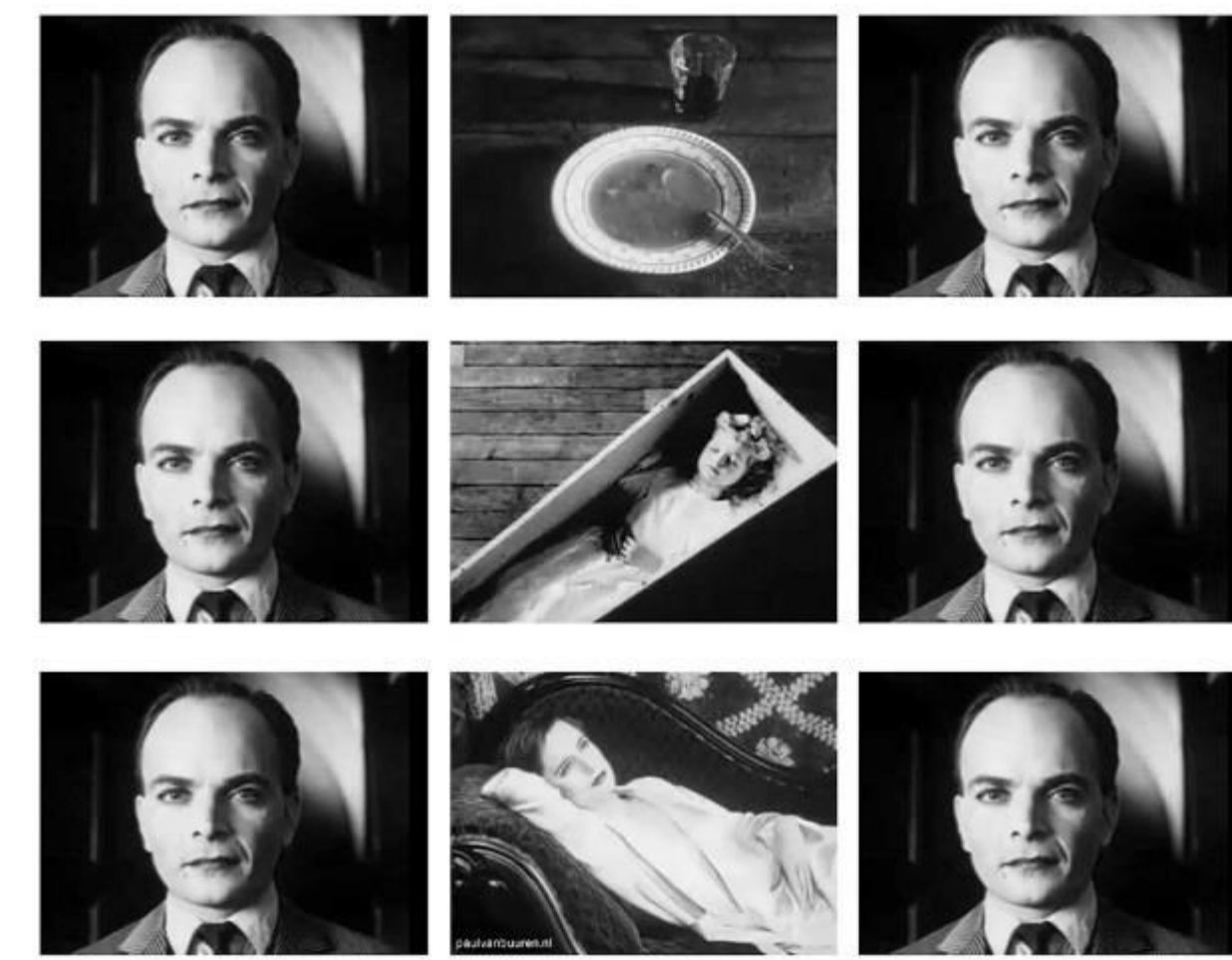
The Effect of an Emotional Stimulus on Neutral Expressions in Portrait Paintings



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BACKGROUND

The Kuleshov Effect originates from the Russian filmmaker Lev Kuleshov in the 1920s. Kuleshov suggested that a preceding film shot appearing before a shot of an actor's neutral face influenced how the actor was perceived by the audience, in terms of the "feeling" he was experiencing. Recent research from Mullennix



et al. (2019) showed that this effect can be produced experimentally by presenting context photographs varying in

emotional valence followed by photographs of actors with neutral expressions. They found that the interpretation of facial expression was altered by preceding context.

GOAL OF THE PRESENT STUDY

The goal of the present study was to extend the findings of Mullennix et al. (2019) to facial expressions of people depicted in classic portrait paintings.

If the previous findings extend to portrait paintings, we predict that perceptions of the portraits should shift according to the prior context, with pleasant photos eliciting perceptions of positive emotion (happiness) and unpleasant photos eliciting perceptions of negative emotions (sadness and fear).

These results would suggest that the arrangement of sequences of paintings in art galleries and museums may affect impressions of artworks.

METHOD

PARTICIPANTS

34 undergraduate students from the Introduction to Psychology subject pool at the University of Pittsburgh at Johnstown.

VARIABLES

Preceding context was manipulated via context photographs varying in emotional valence (pleasantness).

Three Contexts:

- Pleasant
- Unpleasant
- Neutral

PROCEDURE

42 total trials divided into 14 trials per condition. Randomized sequences of a context photograph followed by a neutral portrait painting were presented. Each portrait was presented 3 times, once per context condition.

Context Photograph > Liking Response (1-7 scale) > Neutral Portrait > Facial Emotion Response (7 categories)

P's viewed the stimuli at their own pace. Viewing times for the images and response times were also recorded.

STIMULI



FACIAL PORTRAIT STIMULI

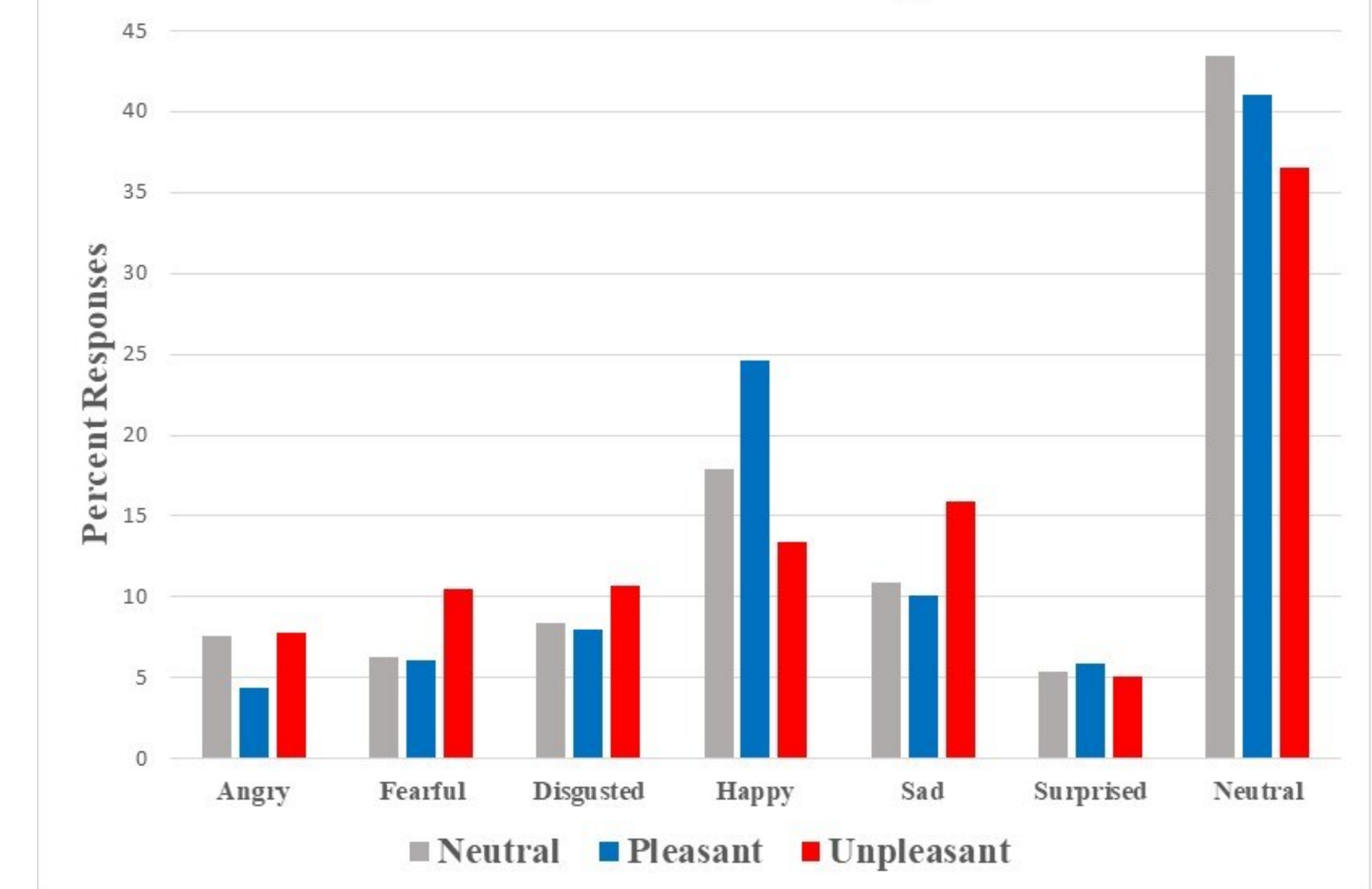
14 neutral portrait paintings were drawn from the Metropolitan Museum of Art and the Rijksmuseum. These stimuli were pilot screened to ensure neutral expressions and to ensure they were low in familiarity to viewers.

CONTEXT PHOTOGRAPHS

42 Neutral, Pleasant, and Unpleasant photos from the International Affective Picture System (IAPS) were used. Stimuli were selected via ratings of pleasantness from IAPS. Photos depicted people, real-life scenes, and objects.

RESULTS

Facial Emotion Labeling Data



There was a significant interaction of context condition with emotion category, $F(12,396) = 5.30, p < .001, \eta_p^2 = .14$. Post-hoc t-tests were conducted to probe the interaction.

CONCLUSIONS

A **Pleasant** context produced more "**Happy**" perceptions of portrait faces.

An **Unpleasant** context produced more "**Fearful**" and "**Sad**" perceptions and less "**Happy**" perceptions of portraits.

There was a trend toward **Unpleasant** context producing more "**Angry**" perceptions of portraits.

We conclude that the affective content contained in preceding contextual photographs affected the interpretation of facial expression in classic portrait paintings. The results were similar to those observed by Mullennix et al. (2019) for photographs of actors' faces. The findings have practical implications for the design of art spaces where artworks are displayed in sequential fashion. Curators should take into account the affective "hangover" that may result from viewing an artwork before a viewer moves on to the next artwork.

Currently, we are examining the degree to which conscious attention to the contextual stimuli are necessary to produce these effects.