



The Need for Cognitive Closure and the Perception of Figurative vs. Abstract Art

Helen Arnscheid, Elisabeth Else, Maya Heinekamp, Carla Hoffmann, and Vera Hesslinger
University of Bamberg, Department of General Psychology and Methodology



Introduction

The way individuals perceive and evaluate art is shaped by various psychological factors, one of which is the *need for cognitive closure* (NCC)—the tendency to seek certainty and avoid ambiguity. Artworks can be clear and figurative, providing a straightforward, easily interpretable representation, or abstract, which often includes ambiguity and open-ended interpretation. This study aims to explore how NCC influences the perception and the aesthetic evaluation of abstract vs. figurative art. We hypothesize that NCC has an impact on the liking of figurative versus abstract images. Specifically, we expect that individuals with high NCC will report a lower liking for abstract as compared to figurative artworks. Conversely, individuals with low NCC, who are more open to ambiguity, are expected to show comparably higher appreciation for abstract artworks.

Additionally, we hypothesize that the interest, perceived completeness and understandability affect reported liking for artworks of the two categories (abstract and figurative).

Method

Participants. The original sample consisted of 127 participants, of whom 13 were removed from the dataset (failed control items, processing time less than 20 minutes). Ninety-three participants are female. Participants' age ranges from 18 to 62 years ($M = 22.8$ years). Overall, the sample is homogenous in terms of age, gender, and educational background (mostly psychology students), which limits the generalizability of the findings to a broader population. It was planned to assess participants' colour vision with the Ishihara test. As the selected test items proved to be insufficient in retrospect, the data could not be taken into account.

Apparatus and Material. The study was conducted online using the Unipark platform. As stimuli we used 9 abstract and 8 figurative artworks from various artists and eras. The selections were matched in terms of colour palettes. These artworks were shown in a randomized order to minimize sequence effects. Participants' Need for Cognitive Closure (NCC) was measured using the 16-item German Short Scale to Measure Need for Cognitive Closure (Schlink & Walther, 2007).



Figure 1. Example figurative: Paul Cézanne, Häuser in der Provence, 1882 – 1885 (Public Domain).

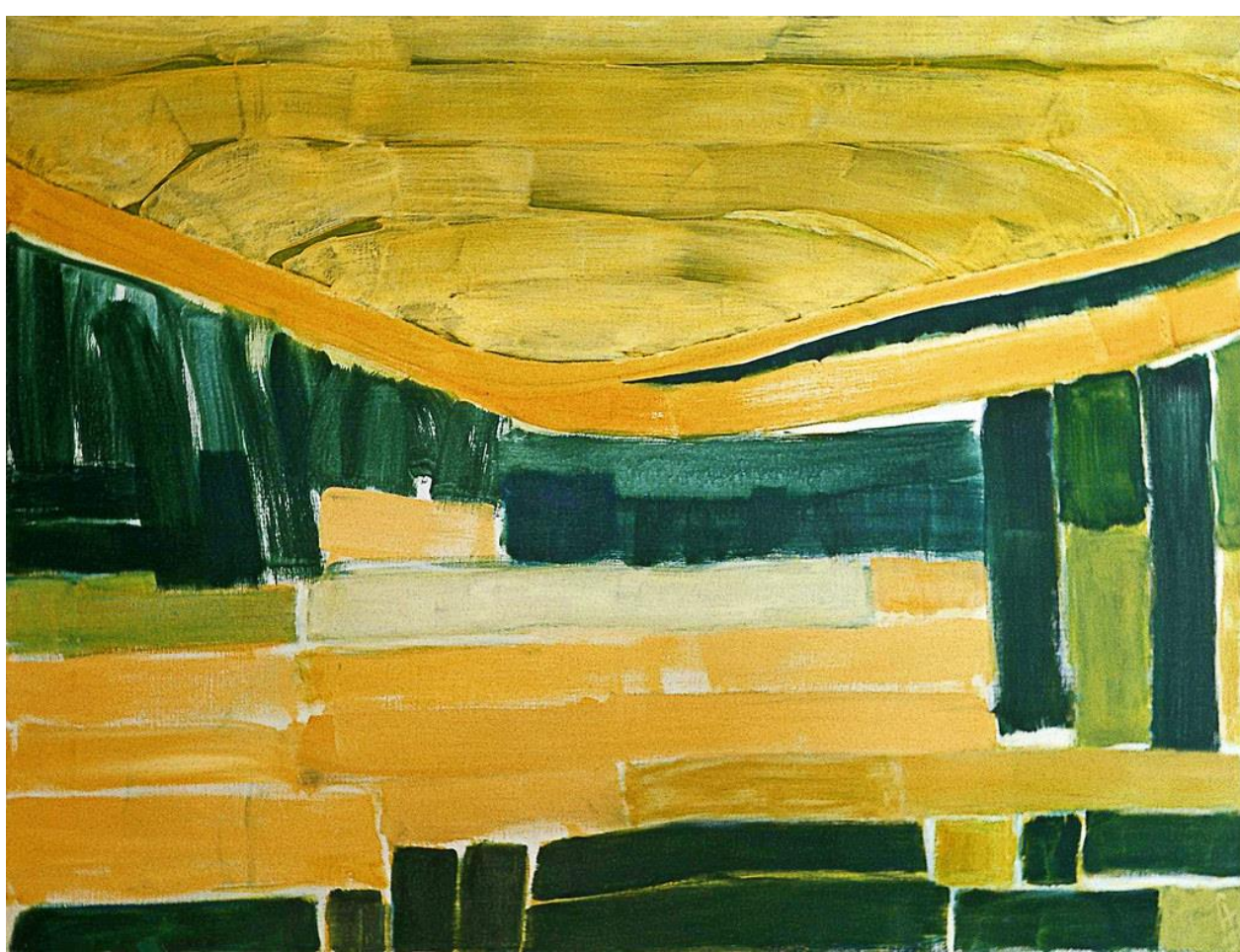


Figure 2. Example abstract: Fons Heijnsbroek, Abstract landscape with sunlight, 1990 (CC BY 2.0).



Figure 3. Example figurative: Claude Monet, Rue sous la neige, Argenteuil, 1875, (Public Domain).

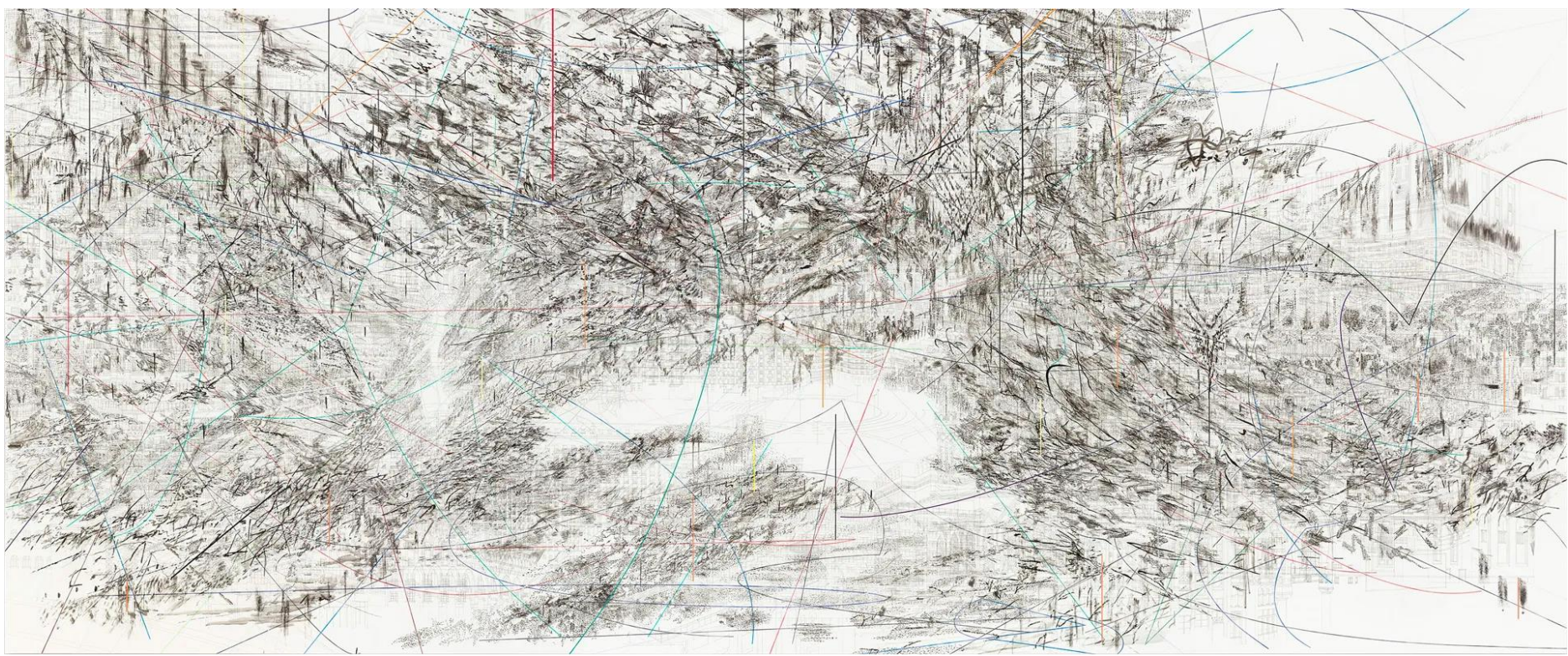


Figure 4. Example abstract: Julie Mehretu, Cairo, 2013, (CC BY-NC 2.0).

Method (Cont.)

Procedure. Participants provided demographic information (e.g. age, gender, art expertise) and completed the Ishihara test. Then, the 17 artworks were presented in randomized order. For each artwork, participants were asked to write down their initial associations and to indicate their liking, interest, perceived completeness, and understandability of the artwork on a 6-point scale (1= *not at all*, 6= *totally*) In the last part of the study, NCC was assessed via the German Short Scale (Schlink & Walther, 2007), and participants' art competence was captured via multiple questions.

Data Analysis A multilevel regression analysis examined factors influencing liking, including artwork category (abstract vs. figurative), NCC score, interest, perceived completeness, and understandability, as well as interactions of these factors. Statistical significance was assessed using *F*-tests with Satterthwaite approximations.

Table 1: Fixed Effects Estimates for Predictors of Liking and Interactions

Term	Estimate	SE	df	t	p
Intercept	−0.500	0.498	902.990	−1.005	0.315
category of artwork (1)	0.385	0.186	896.538	2.068	0.039
NCCScoreM	0.105	0.147	857.855	0.714	0.475
completedness	0.162	0.122	174.721	1.322	0.188
interest	0.711	0.130	105.985	5.470	< .001
understandability	0.166	0.025	270.917	6.701	< .001
category of artwork * NCCScoreM	−0.028	0.046	836.328	−0.609	0.542
NCCScoreM * completedness	0.007	0.037	171.134	0.192	0.848
NCCScoreM * interest	−0.012	0.039	103.811	−0.298	0.767
category of artwork * interest	4.293×10^{-4}	0.021	120.271	0.021	0.983
category of artwork (1) * understandability	−0.022	0.026	95.042	−0.833	0.407
category of artwork * completedness	−0.050	0.018	315.246	−2.754	0.006

Results

Our analysis showed that artwork category significantly influenced liking, with figurative artworks receiving higher ratings than abstract ones, $F(1, 896.54) = 4.28, p = .039$. Ratings for figurative artworks were also higher in terms of understandability and completeness, which contributed to their preference. The strongest predictors of liking were understandability, $F(1, 270.92) = 44.91, p < .001$ and interest, $F(1, 105.99) = 29.92, p < .001$. While completeness showed no direct effect on liking, $F(1, 174.72) = 1.75, p = .188$, its interaction with artwork category significantly enhanced preferences for figurative artworks, $F(1, 315.25) = 7.59, p = .006$. NCC scores, however, did not predict liking, $F(1, 857.85) = 0.51, p = .475$.

Discussion

This study highlights the importance of artwork characteristics, such as understandability and completeness, in shaping aesthetic appreciation. Figurative artworks were consistently rated higher than abstract ones, likely due to their clarity and structured interpretations.

However, several limitations must be considered. The sample, primarily young psychology students, limits the generalizability of the findings. The abstract artworks lacked systematic variation in ambiguity, reducing insights into how ambiguity levels influence aesthetic evaluations. Additionally, the lack of extreme NCC levels in our sample hinders insights on interindividual differences in aesthetic perception related to minimally and maximally pronounced presence of this personality variable. Despite these limitations, our results offer insights about the role of interest and perceived artwork characteristics as well as their interplay for the aesthetic perception of abstract versus figurative art.

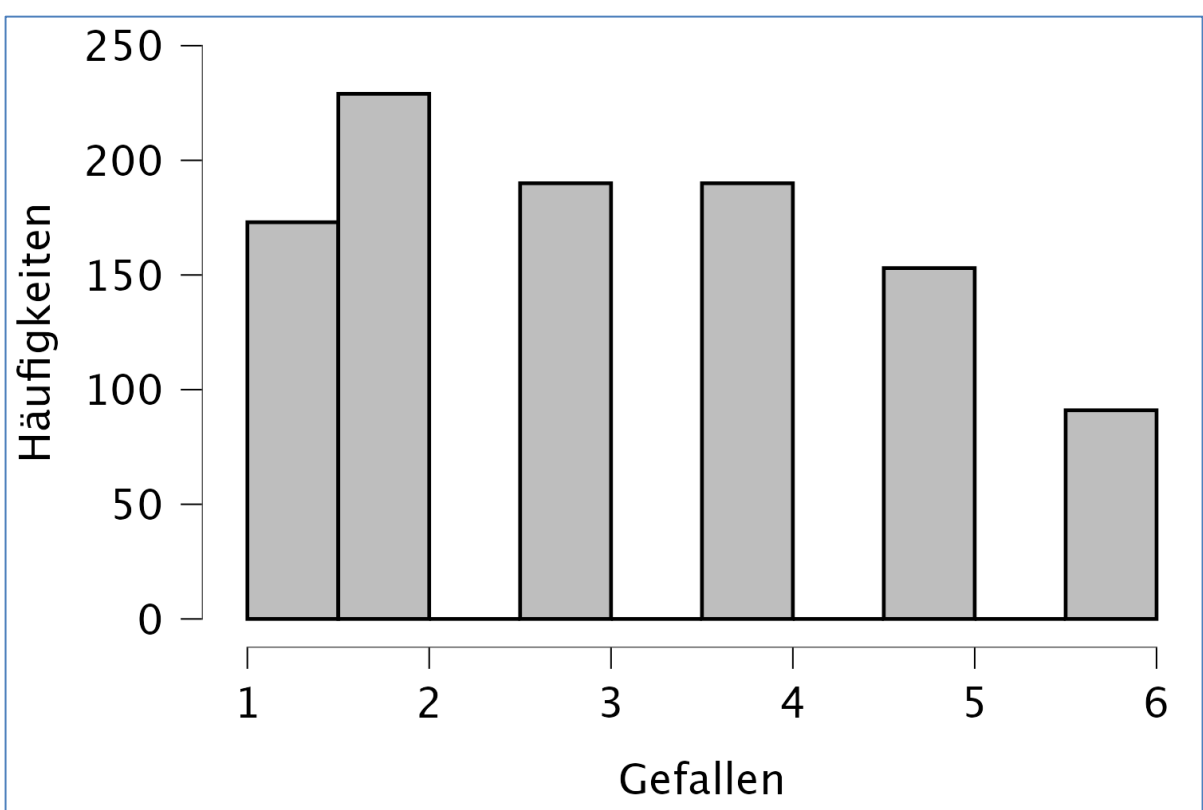


Figure 5. Liking scores for abstract artworks.

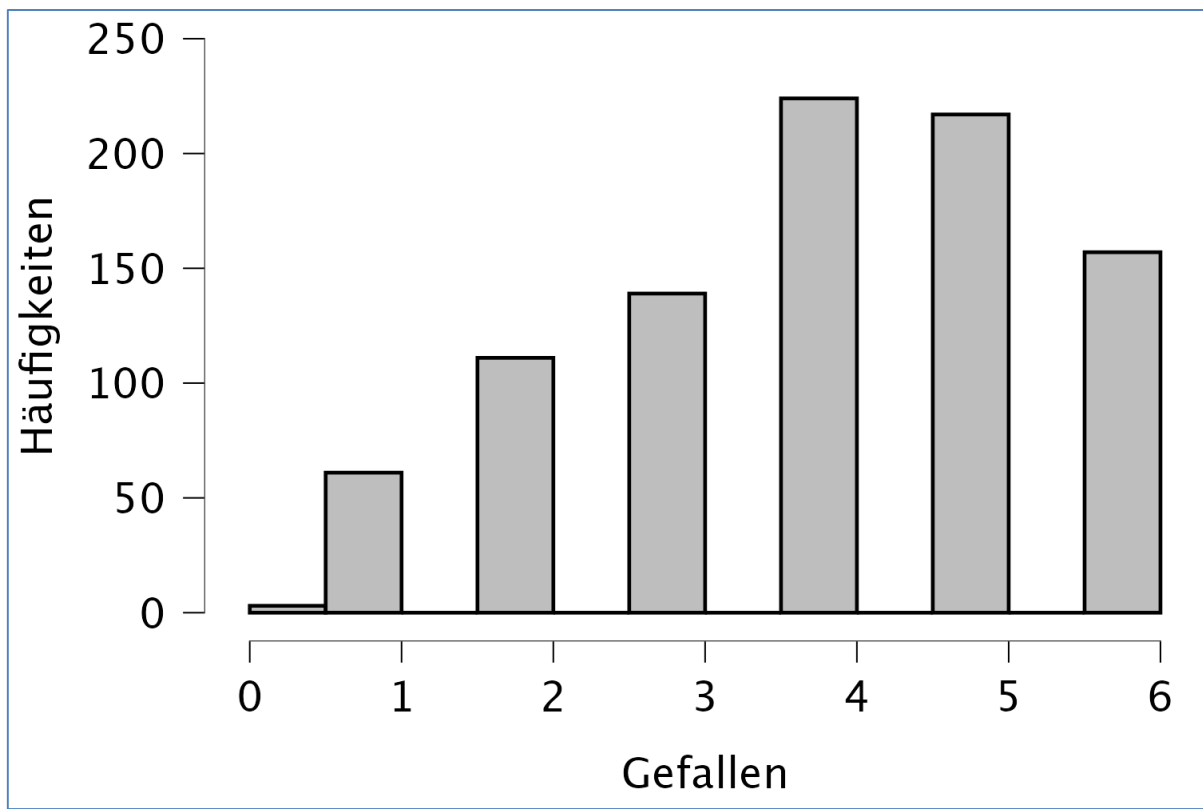


Figure 6. Liking scores for abstract artworks.

Need for Cognitive Closure (NCC)

The NCC describes an individual's desire for definite knowledge and avoiding ambiguity. People with a high NCC strive for quick, clear answers and prefer predictable situations, while those with a low NCC tolerate uncertainty and may delay decision-making.

Key Components of NCC:

- **Preference for Order:**
Desire for structured and organized environments.
- **Preference for Predictability:**
Need for consistency and stability in situations.
- **Decisiveness:**
Tendency to make decisions quickly.
- **Discomfort with Ambiguity:**
Avoidance of unclear or uncertain situations.
- **Closed-Mindedness:**
Resistance to new or conflicting information.

References

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