









Reappraising abstract paintings after exposure to background information

Seongmin A. Park, Kyongsik Yun, and Jaeseung Jeong

| Painter | Title of painting | Normalized mean aesthetic appraisal (0-1) | Individual difference (Kolmogorov-Smirnov Z) |
|-------------------|---|---|--|
| Willem De Kooning | Untitled XVII | 0.520 | 5.097 |
| Hans Hartung | T1957-13 | 0.467 | 4.574 |
| Yves Klein | Anthropometries series 127 | 0.466 | 3.622 |
| Paul Klee | Gespenster Abgang | 0.454 | 3.207 |
| Jackson Pollock | Number 12 | 0.439 | 2.901 |
| Jasper Jones | o through 9 | 0.436 | 2.962 |
| Damien Hirst | Methamphetamine | 0.431 | 3.207 |
| Gehard Richter | Maria | 0.430 | 2.851 |
| Victor Vasarely | Jong (Jone) | 0.427 | 3.013 |
| Barnett Newman | The Word II | 0.410 | 2.916 |
| Josef Albers | Study for homage to the square: Looking ahead | 0.389 | 3.712 |
| Ellsworth Kelly | Yellow curve | 0.381 | 3.708 |

Table A in S2. Candidate paintings and the subject's responses for the perception-based aesthetic appraisal.

Supplementary Information S2 Results

| Paintings | | | | | | | |
|---|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |  |
| Attention modulated by Artist's commentary | | | | | | | |
| 0.560±0.083 | 0.420±0.020 | | 0.610±0.065 | 0.560±0.090 | 0.410±0.099 | | 0.480±0.062 |
| 0.031 | 0.022 | | 0.012 | 0.006 | 0.023 | | 0.014 |
| 0.41 | 0.77 | | 0.57 | 0.42 | 0.51 | | 0.33 |
| 0.420±0.100 | 0.350±0.080 | | 0.350±0.073 | 0.290±0.028 | | | -0.140±0.054 |
| 0.018 | 0.009 | | 0.043 | 0.01 | | | 0.013 |
| 0.47 | 0.6 | | 0.47 | 0.51 | | | 0.67 |
| 0.130±0.024 | -0.170±0.053 | | -0.210±0.029 | 0.180±0.032 | | | |
| 0.018 | 0.011 | | 0.044 | 0.033 | | | |
| 0.22 | 0.6 | | 0.66 | 0.26 | | | |
| -0.260±0.025 | -0.240±0.033 | | -0.220±0.017 | 0.150±0.047 | | | |
| 0.048 | 0.02 | | 0.042 | 0.041 | | | |
| 0.65 | 0.62 | | 0.53 | 0.26 | | | |
| -0.270±0.081 | -0.240±0.030 | | | -0.140±0.030 | | | |
| 0.041 | 0.01 | | | 0.009 | | | |
| 0.61 | 0.39 | | | 0.77 | | | |
| | | | | -0.530±0.052 | | | |
| | | | | 0.03 | | | |
| | | | | 0.42 | | | |
| Number of cells showing significant differences | | | | | | | |
| 5(3:2) | 5(2:3) | 0 | 4(2:2) | 6(4:2) | 1(1:0) | 0 | 2(1:1) |
| Attention modulated by Critic's commentary | | | | | | | |
| 0.400±0.090 | 0.590±0.084 | | 0.610±0.092 | 0.720±0.088 | 0.700±0.092 | 0.520±0.064 | 0.690±0.047 |
| 0.031 | 0.034 | | 0.026 | 0.015 | 0.018 | 0.021 | 0.044 |
| 0.34 | 0.57 | | 0.59 | 0.68 | 0.69 | 0.62 | 0.66 |
| 0.340±0.044 | 0.540±0.070 | | 0.560±0.039 | 0.710±0.058 | 0.450±0.065 | 0.380±0.053 | 0.540±0.097 |
| 0.017 | 0.011 | | 0.037 | 0.026 | 0.032 | 0.012 | 0.009 |
| 0.75 | 0.63 | | 0.75 | 0.54 | 0.28 | 0.6 | 0.39 |
| 0.250±0.020 | 0.490±0.075 | | 0.370±0.079 | 0.400±0.026 | 0.200±0.081 | 0.360±0.073 | 0.440±0.071 |
| 0.017 | 0.026 | | 0.043 | 0.009 | 0.014 | 0.022 | 0.048 |
| 0.26 | 0.63 | | 0.65 | 0.25 | 0.69 | 0.36 | 0.22 |
| 0.180±0.066 | 0.470±0.080 | | 0.140±0.018 | 0.360±0.075 | 0.190±0.047 | 0.350±0.029 | 0.370±0.085 |
| 0.006 | 0.031 | | 0.008 | 0.02 | 0.022 | 0.043 | 0.025 |
| 0.45 | 0.3 | | 0.39 | 0.24 | 0.23 | 0.38 | 0.79 |
| -0.450±0.029 | -0.340±0.016 | | -0.220±0.035 | 0.230±0.077 | 0.180±0.098 | 0.340±0.079 | 0.340±0.068 |
| 0.048 | 0.048 | | 0.033 | 0.006 | 0.026 | 0.007 | 0.03 |
| 0.43 | 0.41 | | 0.47 | 0.36 | 0.74 | 0.77 | 0.52 |
| -0.530±0.028 | -0.460±0.076 | | -0.340±0.058 | -0.230±0.031 | 0.130±0.018 | 0.290±0.017 | -0.200±0.052 |
| 0.024 | 0.02 | | 0.044 | 0.033 | 0.011 | 0.045 | 0.024 |
| 0.47 | 0.42 | | 0.41 | 0.28 | 0.56 | 0.25 | 0.5 |
| -0.540±0.084 | -0.550±0.025 | | -0.490±0.087 | -0.380±0.088 | -0.220±0.070 | 0.270±0.031 | -0.270±0.075 |
| 0.04 | 0.038 | | 0.027 | 0.009 | 0.036 | 0.04 | 0.019 |
| 0.51 | 0.75 | | 0.59 | 0.68 | 0.27 | 0.24 | 0.28 |
| -0.600±0.057 | -0.560±0.048 | | -0.530±0.093 | -0.390±0.095 | -0.230±0.093 | -0.240±0.027 | -0.320±0.064 |
| 0.037 | 0.008 | | 0.008 | 0.037 | 0.032 | 0.042 | 0.044 |
| 0.29 | 0.24 | | 0.49 | 0.64 | 0.51 | 0.45 | 0.54 |
| -0.610±0.060 | -0.670±0.095 | | -0.540±0.030 | -0.510±0.035 | -0.270±0.039 | -0.250±0.027 | -0.380±0.061 |
| 0.033 | 0.037 | | 0.009 | 0.038 | 0.025 | 0.039 | 0.01 |
| 0.37 | 0.23 | | 0.76 | 0.67 | 0.72 | 0.55 | 0.52 |
| -0.670±0.076 | | | | -0.540±0.097 | -0.340±0.028 | -0.440±0.096 | -0.390±0.058 |
| 0.038 | | | | 0.02 | 0.026 | 0.043 | 0.046 |

Supplementary Information S2 Results

| | | | | | | | |
|---|--------|---|--------|---------|---------|--------------|--------------|
| 0.24 | | | | 0.63 | 0.66 | 0.78 | 0.42 |
| | | | | | | -0.580±0.031 | -0.440±0.016 |
| | | | | | | 0.041 | 0.048 |
| | | | | | | 0.56 | 0.71 |
| | | | | | | | -0.480±0.056 |
| | | | | | | | 0.006 |
| | | | | | | | 0.75 |
| Number of cells showing significant differences | | | | | | | |
| 10(4:6) | 9(4:5) | 0 | 9(4:5) | 10(5:5) | 10(6:4) | 11(7:4) | 12(5:7) |

Table B in S2. Reported the number of cells where its attention was modulated significantly during reappraisal of a painting after learning artist commentary or critic's commentary compared to attention on the same painting at initial appreciation using the repeated measures ANOVA and post-hoc analyses that the Bonnferronni correction was applied for the adjustment for multiple comparisons (In association with the Figure 3). The first row indicates the changes in attention duration (second; the decreases in attention marked in red), the second row indicates the significant level of this modulation (P value < 0.05), and the third row indicates the epsilon (ϵ) as the results of the sphericity test for the repeated measures ANOVA that was corrected by the Greenhouse-Geisser methods.