

Nanopublication — Computational Image Analysis - AQC0675

by Arnaud Quercy · Major 2nd Interval - Reflexions 12 · 2024

Claim 1: Computational Image Analysis - AQC0675

Computational image analysis [3] of artwork Major [1] 2nd Interval - Reflexions 12 (AQC0675) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 2026-02-04.

CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 2303x3454 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D9BCBA	28.9	red-orange	silver
2	E0CFD1	19.4	red	lightgray
3	CBA9A3	12.6	red-orange	tan
4	A58F8A	9.5	red-orange	rosybrown
5	313237	7.7	gray	dusty mauve
6	7F7474	7.2	gray	gray
7	524F52	6.5	gray	dusty mauve
8	D7A55D	2.9	yellow-orange	sandybrown
9	DA8131	2.7	orange	peru
10	A64F31	2.5	orange	burnt sienna
11	17141C	0.3	violet	black [Accent]
12	E5E7F6	0.3	blue-violet	white [Accent]
13	161117	0.3	red-violet	black [Accent]

Color Families:

Family	%
red-orange	51.0
gray	21.4
red	19.4
orange	5.2
yellow-orange	2.9
violet	0.3
blue-violet	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
17141C	violet	black	7.2

Hex Family Name Chroma

E5E7F6	blue-violet	white	8.2
161117	red-violet	black	5.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.199
Mean Local Roughness	0.015
Roughness Uniformity	0.02
Edge Density	0.057
Mean Gradient Magnitude	0.127
Gradient Variance	0.043
Gradient Smoothness	0.0
Directional Coherence	0.026
Pattern Complexity	0.117
Pattern Repetition	1.0
Detail Frequency Ratio	0.616
Spatial Variation	0.146
Texture Consistency	0.514

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.645
Brightness Variance	0.199
Brightness Uniformity	0.691
Brightness Skewness	-1.054
Brightness Entropy	7.169
Rms Contrast	0.199
Michelson Contrast	1.0
Weber Contrast	0.646
Mean Local Contrast	0.016
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.635
Shadow Percentage	12.074
Midtone Percentage	26.382
Highlight Percentage	61.544
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.021
Coarse Contrast	0.034
Multiscale Contrast Ratio	0.252
Edge Contrast	0.127
Contrast Clustering	0.486

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.734
Color Clustering	0.642
Color Transition Smoothness	0.667
Transition Uniformity	0.71
Sharp Transition Ratio	0.1
Transition Directionality	0.029
Mean Saturation	0.189
Saturation Variance	0.03
Low Saturation Ratio	0.869
Medium Saturation Ratio	0.09
High Saturation Ratio	0.041
Saturation Clustering	1.0
Hue Concentration	0.726
Complementary Balance	0.127
Analogous Dominance	0.864
Temperature Bias	0.737

Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

REFERENCES

- [1] Arnaud Quercy (2024). Major 2nd Interval - Reflexions 12 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0675.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/major-2nd-interval-reflexions-12_7iq.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

19b94d9d4262f4925e3d6f1df2a0f58e166e909e6df59f2dbdd-f55d3d80184d9

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240718-0171
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