AQC0655

Nanopublication — Computational Image Analysis - AQC0655

by Arnaud Quercy · A Major - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0655

> Computational image analysis [3] of artwork A Major [1] - Research on Harmony - Variation 1 (AQC0655) [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]: 2550x3400 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D6C7AD	14.2	yellow-orange	silver
2		34353F	13.8	violet	dusty mauve
3		A47621	11.4	yellow-orange	darkgoldenrod
4		637A71	11.3	green	dimgray
5		1B1818	10.1	gray	black
6		E7DFD1	10.0	yellow-orange	gainsboro
7		E4AB39	9.7	yellow-orange	goldenrod
8		79948F	7.6	green	lightslategray
9		429598	7.0	blue-green	cadetblue
10		C3A778	4.8	yellow-orange	ochre
11		8A510D	0.3	orange	russet [Accent]
12		908C60	0.3	yellow	gray [Accent]
13		555F46	0.3	yellow-green	dark brown [Accent]

Color Families:

Family	%
yellow-orange	50.1
green	18.9
violet	13.8
gray	10.1
blue-green	7.0
orange	0.3
yellow	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
8A510D	orange	russet	48.8
908C60	yellow	gray	24.7
555F46	yellow-green	dark brown	15.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.248
Mean Local Roughness	0.029
Roughness Uniformity	0.023
Edge Density	0.166
Mean Gradient Magnitude	0.23
Gradient Variance	0.075
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.111
Pattern Repetition	1.0
Detail Frequency Ratio	0.627
Spatial Variation	0.143
Texture Consistency	0.77

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.52
Brightness Variance	0.248
Brightness Uniformity	0.524
Brightness Skewness	-0.256
Brightness Entropy	7.714
Rms Contrast	0.248
Michelson Contrast	1.0
Weber Contrast	0.822
Mean Local Contrast	0.032
Contrast Uniformity	0.224
Dynamic Range	1.0
Effective Dynamic Range	0.776
Shadow Percentage	24.137
Midtone Percentage	41.931
Highlight Percentage	33.931
Shadow Clipping	0.061
Highlight Clipping	0.018
Tonal Balance	0.378
Fine Contrast	0.017
Medium Contrast	0.04
Coarse Contrast	0.057
Multiscale Contrast Ratio	0.293
Edge Contrast	0.23
Contrast Clustering	0.23

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.677
Color Clustering	0.698
Color Transition Smoothness	0.404
Transition Uniformity	0.469
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.378
Saturation Variance	0.069
Low Saturation Ratio	0.543
Medium Saturation Ratio	0.262
High Saturation Ratio	0.195
Saturation Clustering	0.997
Hue Concentration	0.295
Complementary Balance	0.082
Analogous Dominance	0.605
Temperature Bias	0.231

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). A Major - Research on Harmony - Variation 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0655.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/a-major-research-on-harmony-variation-1_7ay.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/10/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)

6ac63135cda59002271261fc3cea8d3ed3ca0989eef89ac96266be673d1d1b73

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240615-0151
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