

Nanopublication — Computational Image Analysis - AQC0546

by Arnaud Quercy · Meditations - Variation 4 · 2024

Claim 1: Computational Image Analysis - AQC0546

Computational image analysis [3] of artwork Meditations [1] - Variation 4 (AQC0546) [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]: 2624x3498 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	E8E3D7	16.8	yellow-orange	white
2	A6A195	14.8	yellow-orange	steel gray
3	DEB890	12.9	orange	burlywood
4	CCA379	12.1	orange	tan
5	B68D64	11.6	orange	ochre
6	BAB3A6	9.7	yellow-orange	steel gray
7	D2CBBF	8.8	yellow-orange	silver
8	A3774D	7.3	orange	peru
9	734E2B	4.6	orange	russet
10	1F1614	1.4	red-orange	black

Color Families:

Family	%
yellow-orange	50.1
orange	48.5
red-orange	1.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.156
Mean Local Roughness	0.022
Roughness Uniformity	0.015
Edge Density	0.076
Mean Gradient Magnitude	0.137
Gradient Variance	0.023
Gradient Smoothness	0.0
Directional Coherence	0.002
Pattern Complexity	0.135
Pattern Repetition	1.0

Metric Value

Detail Frequency Ratio	0.644
Spatial Variation	0.112
Texture Consistency	0.686

BRIGHTNESS & CONTRAST ANALYSIS

Metric Value

Mean Brightness	0.682
Brightness Variance	0.156
Brightness Uniformity	0.771
Brightness Skewness	-1.003
Brightness Entropy	7.08
Rms Contrast	0.156
Michelson Contrast	1.0
Weber Contrast	0.423
Mean Local Contrast	0.02
Contrast Uniformity	0.272
Dynamic Range	0.965
Effective Dynamic Range	0.522
Shadow Percentage	3.538
Midtone Percentage	40.111
Highlight Percentage	56.351
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.016
Medium Contrast	0.024
Coarse Contrast	0.03
Multiscale Contrast Ratio	0.534
Edge Contrast	0.137
Contrast Clustering	0.314

SPATIAL DISTRIBUTION ANALYSIS

Metric Value

Spatial Coherence	0.743
Color Clustering	0.69
Color Transition Smoothness	0.659
Transition Uniformity	0.838
Sharp Transition Ratio	0.1
Transition Directionality	0.002
Mean Saturation	0.267
Saturation Variance	0.038
Low Saturation Ratio	0.51
Medium Saturation Ratio	0.474
High Saturation Ratio	0.016
Saturation Clustering	0.999
Hue Concentration	0.981

Metric	Value
Complementary Balance	0.007
Analogous Dominance	0.991
Temperature Bias	0.985

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). Meditations - Variation 4 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0546.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/meditations-variation-4_64k.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)

1bf10583a55db68f5a0a68c4c84e41cf5c31c92825ab12301abbb9f7f0dbfb-d3

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