

# Nanopublication — Computational Image Analysis - AQC0545

by Arnaud Quercy · Meditations - Variation 3 · 2024

## Claim 1: Computational Image Analysis - AQC0545

The artwork Meditations [1] - Variation 3 (AQC0545) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

### 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]: 2872x3830 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D2CBC2	22.3	yellow-orange	lightgray
2	818C72	16.6	yellow-green	gray
3	717B62	11.3	yellow-green	dimgray
4	BCB6AC	10.5	yellow-orange	silver
5	929E83	10.2	yellow-green	darkseagreen
6	E7E1D7	9.4	yellow-orange	gainsboro
7	59786F	7.6	green	dimgray
8	4B6458	7.2	yellow-green	darkslategray
9	2A4E54	4.0	blue-green	darkslategray
10	1C1F1A	0.8	gray	very dark gray
11	5B3E22	0.3	orange	dark brown [Accent]
12	434230	0.3	yellow	darkslategray [Accent]

#### Color Families:

Family	%
yellow-green	45.3
yellow-orange	42.3
green	7.6
blue-green	4.0
gray	0.8
orange	0.3
yellow	0.3

#### Accent Colors:

Hex	Family Name	Chroma
5B3E22	orange	dark brown 23.8
434230	yellow	darkslategray 11.4

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.186
Mean Local Roughness	0.015
Roughness Uniformity	0.011
Edge Density	0.06
Mean Gradient Magnitude	0.111
Gradient Variance	0.016
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.13
Pattern Repetition	1.0
Detail Frequency Ratio	0.632
Spatial Variation	0.087
Texture Consistency	0.748

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.609
Brightness Variance	0.186
Brightness Uniformity	0.694
Brightness Skewness	-0.14
Brightness Entropy	7.329
Rms Contrast	0.186
Michelson Contrast	1.0
Weber Contrast	0.553
Mean Local Contrast	0.015
Contrast Uniformity	0.195
Dynamic Range	0.992
Effective Dynamic Range	0.576
Shadow Percentage	6.145
Midtone Percentage	51.766
Highlight Percentage	42.089
Shadow Clipping	0.009
Highlight Clipping	0.0
Tonal Balance	0.08
Fine Contrast	0.009
Medium Contrast	0.018
Coarse Contrast	0.025
Multiscale Contrast Ratio	0.361
Edge Contrast	0.111
Contrast Clustering	0.252

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.737
Color Clustering	0.926

Metric	Value
Color Transition Smoothness	0.715
Transition Uniformity	0.887
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.169
Saturation Variance	0.014
Low Saturation Ratio	0.922
Medium Saturation Ratio	0.067
High Saturation Ratio	0.01
Saturation Clustering	1.0
Hue Concentration	0.68
Complementary Balance	0.007
Analogous Dominance	0.515
Temperature Bias	-0.532

## 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 3 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0545.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/meditations-variation-3\\_646.html](https://artquamanima.com/en/artworks/2024/01/meditations-variation-3_646.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

<b>Claim type</b>	computational analysis
<b>Voice</b>	third person
<b>Epistemic status</b>	empirical measurement
<b>Methodology</b>	computational analysis
<b>Certainty</b>	high

## CHECKSUM (SHA-256)

93cfed6119a7326588f5f05e4d502cc1d680494d413e0d24ee7266866e-f2c126

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Untamed Creations
<b>Certificate</b>	20240302-0041
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