

# Nanopublication — Computational Image Analysis - AQC0544

by Arnaud Quercy · Meditations - Variation 2 · 2024

## Claim 1: Computational Image Analysis - AQC0544

Computational image analysis [3] of artwork Meditations [1] - Variation 2 (AQC0544) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	777672	19.6	gray	gray
2	878887	14.6	gray	grey
3	8B8070	12.2	yellow-orange	dimgray
4	A29480	11.7	yellow-orange	rosybrown
5	B7A993	10.9	yellow-orange	steel gray
6	9B9E9D	10.6	gray	steel gray
7	686662	10.1	gray	dimgray
8	C6BBA8	7.5	yellow-orange	silver
9	6A312A	2.2	red-orange	russet
10	1E0905	0.5	red-orange	black
11	F3D8BE	0.3	orange	wheat [Accent]
12	414E51	0.3	blue	darkslategray [Accent]

### Color Families:

Family	%
gray	54.9
yellow-orange	42.4
red-orange	2.7
orange	0.3
blue	0.3

### Accent Colors:

Hex	Family Name	Chroma
F3D8BE	orange wheat	16.8
414E51	blue darkslategray	5.7

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.111

Metric	Value
Mean Local Roughness	0.014
Roughness Uniformity	0.011
Edge Density	0.064
Mean Gradient Magnitude	0.141
Gradient Variance	0.019
Gradient Smoothness	0.01
Directional Coherence	0.009
Pattern Complexity	0.112
Pattern Repetition	1.0
Detail Frequency Ratio	0.596
Spatial Variation	0.072
Texture Consistency	0.721

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.542
Brightness Variance	0.111
Brightness Uniformity	0.795
Brightness Skewness	-0.367
Brightness Entropy	6.775
Rms Contrast	0.111
Michelson Contrast	1.0
Weber Contrast	0.392
Mean Local Contrast	0.016
Contrast Uniformity	0.271
Dynamic Range	1.0
Effective Dynamic Range	0.333
Shadow Percentage	2.736
Midtone Percentage	82.581
Highlight Percentage	14.683
Shadow Clipping	0.0
Highlight Clipping	0.002
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.021
Coarse Contrast	0.037
Multiscale Contrast Ratio	0.186
Edge Contrast	0.141
Contrast Clustering	0.279

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.709
Color Clustering	0.676
Color Transition Smoothness	0.642
Transition Uniformity	0.878

Metric	Value
Sharp Transition Ratio	0.1
Transition Directionality	0.008
Mean Saturation	0.134
Saturation Variance	0.015
Low Saturation Ratio	0.953
Medium Saturation Ratio	0.039
High Saturation Ratio	0.008
Saturation Clustering	1.0
Hue Concentration	0.982
Complementary Balance	0.0
Analogous Dominance	1.0
Temperature Bias	1.0

## 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 2 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0544.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/meditations-variation-2\\_63s.html](https://artquamanima.com/en/artworks/2024/01/meditations-variation-2_63s.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)

6f187d1143b045c564b202a8920698fffc9161eab907360367b058b983a-bee95

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Untamed Creations
<b>Certificate</b>	20240302-0040
<b>Asset code</b>	AQC0544
<b>Version</b>	1
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