

Nanopublication — Computational Image Analysis - AQC0446

by Arnaud Quercy · Musing · 2023

Claim 1: Computational Image Analysis - AQC0446

The artwork Musing [1] (AQC0446) [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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	C7AF9A	16.4	orange	tan
2	D7C0AC	15.8	orange	silver
3	B59E8A	13.8	orange	rosybrown
4	A18B77	10.0	orange	gray
5	E3D2C2	9.0	orange	lightgray
6	443120	8.0	orange	darkslategray
7	8A7562	7.5	orange	grey
8	5A4735	7.1	orange	dark brown
9	725E4B	6.7	orange	dimgray
10	2C1A0B	5.6	orange	very dark gray
11	FCF1DE	0.3	yellow-orange	cornsilk [Accent]
12	F4F1E5	0.3	yellow	white [Accent]

Color Families:

Family	%
orange	100.0
yellow-orange	0.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
FCF1DE	yellow-orange	cornsilk	10.0
F4F1E5	yellow	white	6.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.22
Mean Local Roughness	0.04
Roughness Uniformity	0.026
Edge Density	0.239

Metric Value

Mean Gradient Magnitude	0.332
Gradient Variance	0.083
Gradient Smoothness	0.13
Directional Coherence	0.007
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.642
Spatial Variation	0.113
Texture Consistency	0.738

BRIGHTNESS & CONTRAST ANALYSIS

Metric Value

Mean Brightness	0.566
Brightness Variance	0.22
Brightness Uniformity	0.612
Brightness Skewness	-0.642
Brightness Entropy	7.546
Rms Contrast	0.22
Michelson Contrast	1.0
Weber Contrast	0.737
Mean Local Contrast	0.043
Contrast Uniformity	0.414
Dynamic Range	0.996
Effective Dynamic Range	0.678
Shadow Percentage	20.103
Midtone Percentage	36.251
Highlight Percentage	43.647
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.232
Fine Contrast	0.022
Medium Contrast	0.054
Coarse Contrast	0.076
Multiscale Contrast Ratio	0.288
Edge Contrast	0.332
Contrast Clustering	0.262

SPATIAL DISTRIBUTION ANALYSIS

Metric Value

Spatial Coherence	0.661
Color Clustering	0.898
Color Transition Smoothness	0.153
Transition Uniformity	0.446
Sharp Transition Ratio	0.1
Transition Directionality	0.008
Mean Saturation	0.299

Metric	Value
Saturation Variance	0.028
Low Saturation Ratio	0.649
Medium Saturation Ratio	0.31
High Saturation Ratio	0.041
Saturation Clustering	0.998
Hue Concentration	0.999
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 (2023). Musing — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0446.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/musing_51o.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)

63431574a6ea03194034348bf3db4a2ace861bf08fd-c6ae355f11e1392659f43

Artist Arnaud Quercy

Date 2023

Collection Untamed Creations

Certificate 20231231-0032

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