

Nanopublication — Computational Image Analysis - AQC0512

by Arnaud Quercy · Quiet Embrace · 2024

Claim 1: Computational Image Analysis - AQC0512

K-means clustering analysis [3] (10 colors) performed on artwork Quiet [1] Embrace (AQC0512) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 1366x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	C6C2B2	17.1	yellow	silver
2	ABA792	14.1	yellow	steel gray
3	DEDACD	13.1	yellow	lightgray
4	8D8C77	11.3	yellow	gray
5	41403A	9.2	gray	darkslategray
6	6B6B58	8.6	yellow	dimgray
7	CCBC80	8.1	yellow	tan
8	201B14	7.1	orange	very dark gray
9	B19251	6.9	yellow-orange	peru
10	9F531A	4.6	orange	burnt sienna
11	253B72	0.3	violet	dusty mauve [Accent]
12	6A9A8D	0.3	green	cadetblue [Accent]
13	828D3A	0.3	yellow-green	olivedrab [Accent]
14	6F3322	0.3	red-orange	russet [Accent]
15	45576A	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
yellow	72.2
orange	11.7
gray	9.2
yellow-orange	6.9
violet	0.3
green	0.3
yellow-green	0.3
red-orange	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
253B72	violet	dusty mauve	35.7
6A9A8D	green	cadetblue	19.1
828D3A	yellow-green	olivedrab	44.9
6F3322	red-orange	russet	34.0
45576A	blue-violet	grayish purple	13.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.224
Mean Local Roughness	0.048
Roughness Uniformity	0.023
Edge Density	0.308
Mean Gradient Magnitude	0.369
Gradient Variance	0.088
Gradient Smoothness	0.197
Directional Coherence	0.004
Pattern Complexity	0.117
Pattern Repetition	1.0
Detail Frequency Ratio	0.642
Spatial Variation	0.105
Texture Consistency	0.73

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.579
Brightness Variance	0.224
Brightness Uniformity	0.612
Brightness Skewness	-0.653
Brightness Entropy	7.677
Rms Contrast	0.224
Michelson Contrast	1.0
Weber Contrast	0.731
Mean Local Contrast	0.049
Contrast Uniformity	0.539
Dynamic Range	1.0
Effective Dynamic Range	0.725
Shadow Percentage	17.214
Midtone Percentage	39.283
Highlight Percentage	43.503
Shadow Clipping	0.042
Highlight Clipping	0.003
Tonal Balance	0.343
Fine Contrast	0.029
Medium Contrast	0.06
Coarse Contrast	0.082
Multiscale Contrast Ratio	0.347

Metric	Value
Edge Contrast	0.369
Contrast Clustering	0.27

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.66
Color Clustering	0.748
Color Transition Smoothness	0.064
Transition Uniformity	0.403
Sharp Transition Ratio	0.1
Transition Directionality	0.004
Mean Saturation	0.257
Saturation Variance	0.048
Low Saturation Ratio	0.701
Medium Saturation Ratio	0.239
High Saturation Ratio	0.061
Saturation Clustering	0.997
Hue Concentration	0.862
Complementary Balance	0.022
Analogous Dominance	0.913
Temperature Bias	0.806

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). Quiet Embrace — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0512.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/quiet-embrace_5rc.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)

57691f9b7dfd96a5768b44d79b-
b6b6c984eca750945c01d6a79c494e0eec832b

Artist	Arnaud Quercy
Date	2024
Collection	Mediterranean Echoes
Certificate	20240120-0008
Asset code	AQC0512
Version	1
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