

Nanopublication — Computational Image Analysis - AQC0867

by Arnaud Quercy · C Octaves - Research on Harmony - Reflections 38 · 2025

Claim 1: Computational Image Analysis - AQC0867

The artwork C Octaves [1] - Research on Harmony - Reflections 38 (AQC0867) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2025-12-11. 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]: 1839x2758 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	 D096A2	16.9	red	rosybrown
2	 D2271B	16.5	red-orange	firebrick
3	 A9152A	12.7	red-orange	brown
4	 DEA5B0	10.9	red	tan
5	 342F31	10.6	gray	dusty mauve
6	 251C1D	9.8	gray	very dark gray
7	 C08693	8.1	red	palevioletred
8	 E8E1DA	7.1	white	gainsboro
9	 DACEC9	6.4	orange	lightgray
10	 64494D	0.9	red	dimgray

Color Families:

Family	%
red	36.9
red-orange	29.3
gray	20.4
white	7.1
orange	6.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.252
Mean Local Roughness	0.02
Roughness Uniformity	0.017
Edge Density	0.075
Mean Gradient Magnitude	0.159
Gradient Variance	0.04
Gradient Smoothness	0.0
Directional Coherence	0.01

Metric	Value
Pattern Complexity	0.111
Pattern Repetition	1.0
Detail Frequency Ratio	0.616
Spatial Variation	0.207
Texture Consistency	0.528

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.483
Brightness Variance	0.252
Brightness Uniformity	0.478
Brightness Skewness	0.064
Brightness Entropy	7.403
Rms Contrast	0.252
Michelson Contrast	1.0
Weber Contrast	0.807
Mean Local Contrast	0.022
Contrast Uniformity	0.152
Dynamic Range	1.0
Effective Dynamic Range	0.741
Shadow Percentage	37.478
Midtone Percentage	29.94
Highlight Percentage	32.582
Shadow Clipping	0.001
Highlight Clipping	0.001
Tonal Balance	0.103
Fine Contrast	0.012
Medium Contrast	0.027
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.3
Edge Contrast	0.159
Contrast Clustering	0.472

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.739
Color Clustering	0.711
Color Transition Smoothness	0.601
Transition Uniformity	0.719
Sharp Transition Ratio	0.1
Transition Directionality	0.01
Mean Saturation	0.405
Saturation Variance	0.102
Low Saturation Ratio	0.621
Medium Saturation Ratio	0.081
High Saturation Ratio	0.298

Metric	Value
Saturation Clustering	0.999
Hue Concentration	0.987
Complementary Balance	0.0
Analogous Dominance	0.994
Temperature Bias	0.996

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 (2025). C Octaves - Research on Harmony - Reflections 38 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0867.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/c-octaves-research-on-harmony-reflections-38_hye.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h
<https://multimodal.institute/en/publications/2025/10/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)

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