

# Nanopublication — Computational Image Analysis - AQC0815

by Arnaud Quercy · C Octaves - Reflexions 35 · 2025

## Claim 1: Computational Image Analysis - AQC0815

K-means clustering analysis [3] (10 colors) performed on artwork C Octaves [1] - Reflexions 35 (AQC0815) [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]: 2328x3104 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	E5AD90	29.8	orange	burlywood
2	EEBA9F	16.2	orange	tan
3	DA9C83	12.6	orange	darksalmon
4	C5A791	11.4	orange	rosybrown
5	B2917D	9.8	orange	ochre
6	957662	5.4	orange	gray
7	71584B	4.2	orange	dimgray
8	CF594C	3.6	red-orange	indianred
9	DC766A	3.5	red-orange	lightcoral
10	46332D	3.3	red-orange	darkslategray
11	FAC9D2	0.3	red	pink [Accent]

#### Color Families:

Family	%
orange	89.6
red-orange	10.4
red	0.3

#### Accent Colors:

Hex	Family	Name	Chroma
FAC9D2	red	pink	19.1

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.135
Mean Local Roughness	0.023
Roughness Uniformity	0.02
Edge Density	0.128
Mean Gradient Magnitude	0.183
Gradient Variance	0.042

Metric	Value
Gradient Smoothness	0.0
Directional Coherence	0.004
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.635
Spatial Variation	0.076
Texture Consistency	0.59

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.655
Brightness Variance	0.135
Brightness Uniformity	0.794
Brightness Skewness	-1.606
Brightness Entropy	6.682
Rms Contrast	0.135
Michelson Contrast	1.0
Weber Contrast	0.401
Mean Local Contrast	0.024
Contrast Uniformity	0.191
Dynamic Range	1.0
Effective Dynamic Range	0.427
Shadow Percentage	4.267
Midtone Percentage	32.941
Highlight Percentage	62.792
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.03
Coarse Contrast	0.043
Multiscale Contrast Ratio	0.289
Edge Contrast	0.183
Contrast Clustering	0.41

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.732
Color Clustering	0.444
Color Transition Smoothness	0.545
Transition Uniformity	0.731
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.362
Saturation Variance	0.008
Low Saturation Ratio	0.221

Metric	Value
Medium Saturation Ratio	0.773
High Saturation Ratio	0.006
Saturation Clustering	1.0
Hue Concentration	0.99
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 (2025). C Octaves - Reflexions 35 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0815.html>

[2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2025/01/c-octaves-reflexions-35\\_916.html](https://artquamanima.com/en/artworks/2025/01/c-octaves-reflexions-35_916.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)

f1c26f67140aca5c300e1f5ba7376cc12d1169b3cb02c-c71850fe7c389d99893

**Artist** Arnaud Quercy

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**Collection** Synesthetic Explorations

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