AQC0548

Nanopublication — Computational Image Analysis - AQC0548

by Arnaud Quercy · C Major9 - Research on Harmony · 2024

Claim 1: Computational Image Analysis - AQC0548

> K-means clustering analysis [3] (10 colors) performed on artwork C Major9 - Research [1] on Harmony (AQC0548) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		CC6029	15.7	orange	chocolate
2		DC6F39	14.1	orange	peru
3		E09873	13.6	orange	darksalmon
4		272424	13.3	gray	very dark gray
5		CA8460	12.6	orange	indianred
6		151010	10.7	black	black
7		B84F1A	8.7	orange	burnt sienna
8		EF854F	6.2	orange	coral
9		4B4242	3.2	gray	darkslategray
10		DACCB3	1.9	yellow-orange	silver
11		F6F3DE	0.3	yellow	beige [Accent]
12		7E534A	0.3	red-orange	dimgray [Accent]

Color Families:

Family	%
orange	70.9
gray	16.5
black	10.7
yellow-orange	1.9
yellow	0.3
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
F6F3DE	yellow	beige	10.4
7E534A	red-orange	dimgray	21.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.21
Mean Local Roughness	0.029
Roughness Uniformity	0.017
Edge Density	0.194
Mean Gradient Magnitude	0.243
Gradient Variance	0.04
Gradient Smoothness	0.174
Directional Coherence	0.012
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.649
Spatial Variation	0.165
Texture Consistency	0.335

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.442
Brightness Variance	0.21
Brightness Uniformity	0.525
Brightness Skewness	-0.605
Brightness Entropy	7.273
Rms Contrast	0.21
Michelson Contrast	1.0
Weber Contrast	0.84
Mean Local Contrast	0.032
Contrast Uniformity	0.449
Dynamic Range	1.0
Effective Dynamic Range	0.616
Shadow Percentage	26.911
Midtone Percentage	63.898
Highlight Percentage	9.191
Shadow Clipping	0.044
Highlight Clipping	0.0
Tonal Balance	0.013
Fine Contrast	0.016
Medium Contrast	0.04
Coarse Contrast	0.059
Multiscale Contrast Ratio	0.275
Edge Contrast	0.243
Contrast Clustering	0.665

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.766
Color Clustering	0.548
Color Transition Smoothness	0.391
Transition Uniformity	0.75

Metric	Value
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.525
Saturation Variance	0.08
Low Saturation Ratio	0.246
Medium Saturation Ratio	0.366
High Saturation Ratio	0.388
Saturation Clustering	0.998
Hue Concentration	0.991
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). C Major9 - Research on Harmony — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0548.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony_65c.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 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)

af6ebda6ca5b9497aba690f4acce7926fd28dec4c5da2a8f835618b2c221b-f48

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240306-0044
Asset code	AQC0548
Version	1
Published	2026-03-25

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-03-27

Persistent URI: https://multimodal.institute/en/nanopubs/2026/03/AQC0548-computational-image-analysis-aqc0548.pdf