Nanopublication — Computational Image Analysis - AQC0664

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

Claim 1: Computational Image Analysis - AQC0664

> The artwork C+ - Research [1] on Harmony (AQC0664) [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]: 2384x3178 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		EE693A	18.6	orange	tomato
2		AAB1AF	14.7	gray	steel gray
3		EA8159	14.5	orange	coral
4		C8C8C3	12.3	white	silver
5		8B9797	11.4	gray	lightslategray
6		707675	8.8	gray	dimgray
7		51514F	8.3	gray	darkslategray
8		EB9774	6.3	orange	darksalmon
9		B75844	2.6	red-orange	indianred
10		372019	2.5	red-orange	very dark gray
11		F2E2E4	0.3	red	white [Accent]
12		2D3A3D	0.3	blue-green	darkslategray [Accent]
13		2D393C	0.3	blue	darkslategray [Accent]

Color Families:

Family	%
gray	43.2
orange	39.4
white	12.3
red-orange	5.1
red	0.3
blue-green	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
F2E2E4	red	white	6.1
2D3A3D	blue-green	darkslategray	5.0
2D393C	blue	darkslategray	5.7

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.145
Mean Local Roughness	0.017
Roughness Uniformity	0.015
Edge Density	0.092
Mean Gradient Magnitude	0.149
Gradient Variance	0.029
Gradient Smoothness	0.0
Directional Coherence	0.01
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.607
Spatial Variation	0.093
Texture Consistency	0.617

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.58
Brightness Variance	0.145
Brightness Uniformity	0.749
Brightness Skewness	-0.819
Brightness Entropy	7.115
Rms Contrast	0.145
Michelson Contrast	1.0
Weber Contrast	0.51
Mean Local Contrast	0.019
Contrast Uniformity	0.179
Dynamic Range	1.0
Effective Dynamic Range	0.494
Shadow Percentage	7.397
Midtone Percentage	65.305
Highlight Percentage	27.298
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.023
Coarse Contrast	0.038
Multiscale Contrast Ratio	0.234
Edge Contrast	0.149
Contrast Clustering	0.383

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.742
Color Clustering	0.616
Color Transition Smoothness	0.621
Transition Uniformity	0.803
Sharp Transition Ratio	0.1
Transition Directionality	0.024
Mean Saturation	0.345
Saturation Variance	0.086
Low Saturation Ratio	0.553
Medium Saturation Ratio	0.255
High Saturation Ratio	0.192
Saturation Clustering	1.0
Hue Concentration	0.827
Complementary Balance	0.085
Analogous Dominance	0.915
Temperature Bias	0.83

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+ - Research on Harmony — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0664.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/c-research-on-harmony_7eg.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-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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30c41ef0c0f1e2cd2e-
faf4f94a2d75e7e14a60d78c1e108084d20a847e0ee5f0
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Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240718-0160
Asset code	AQC0664
Version	1
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