AQC0550

Nanopublication — Computational Image Analysis - AQC0550

by Arnaud Quercy · C Major9 - Research on Harmony - Variation 2 · 2024

Claim 1: Computational Image Analysis - AQC0550

> K-means clustering analysis [3] (10 colors) performed on artwork C Major9 - Research [1] on Harmony - Variation 2 (AQC0550) [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		CF5D2F	18.4	orange	chocolate
2		27201F	15.5	gray	very dark gray
3		DB9E7A	14.6	orange	darksalmon
4		BD4C1F	10.9	orange	burnt sienna
5		3D3532	10.0	gray	darkslategray
6		EDAF8B	9.1	orange	burlywood
7		E16E40	8.6	orange	peru
8		C58A68	5.6	orange	rosybrown
9		655950	3.8	orange	dimgray
10		DDCFB6	3.3	yellow-orange	wheat
11		B1AA96	0.3	yellow	steel gray [Accent]

Color Families:

Family	%
orange	71.1
gray	25.6
yellow-orange	3.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
B1AA96	yellow	steel gray	11.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.211
Mean Local Roughness	0.031
Roughness Uniformity	0.019
Edge Density	0.204
Mean Gradient Magnitude	0.25
Gradient Variance	0.048
Gradient Smoothness	0.119
Directional Coherence	0.01
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.66
Spatial Variation	0.163
Texture Consistency	0.383

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.465
Brightness Variance	0.211
Brightness Uniformity	0.547
Brightness Skewness	-0.22
Brightness Entropy	7.467
Rms Contrast	0.211
Michelson Contrast	1.0
Weber Contrast	0.789
Mean Local Contrast	0.034
Contrast Uniformity	0.405
Dynamic Range	1.0
Effective Dynamic Range	0.635
Shadow Percentage	27.202
Midtone Percentage	50.215
Highlight Percentage	22.583
Shadow Clipping	0.017
Highlight Clipping	0.0
Tonal Balance	0.161
Fine Contrast	0.019
Medium Contrast	0.042
Coarse Contrast	0.058
Multiscale Contrast Ratio	0.322
Edge Contrast	0.25
Contrast Clustering	0.617

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.729
Color Clustering	0.639
Color Transition Smoothness	0.368
Transition Uniformity	0.672
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.489
Saturation Variance	0.066

Metric	Value
Low Saturation Ratio	0.295
Medium Saturation Ratio	0.363
High Saturation Ratio	0.342
Saturation Clustering	0.998
Hue Concentration	0.995
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 - Variation 2 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0550.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony-variation-2_664.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)

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