AQC0522

Nanopublication — Computational Image Analysis - AQC0522

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

Claim 1: Computational Image Analysis - AQC0522

> K-means clustering analysis [3] (10 colors) performed on artwork D Major9 - Research [1] on Harmony - Variation 2 (AQC0522) [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]: 1635x2179 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		CD986F	17.3	orange	darksalmon
2		454542	13.8	gray	darkslategray
3		DCAE8A	13.5	orange	burlywood
4		BC8454	13.2	orange	peru
5		A86C37	9.8	orange	burnt sienna
6		666561	7.1	gray	dimgray
7		834C23	7.1	orange	russet
8		F0C9AC	6.9	orange	wheat
9		242627	6.8	gray	very dark gray
10		8D8C88	4.6	gray	gray
11		BE9126	0.3	yellow-orange	darkgoldenrod [Accent]

Color Families:

Family	%
orange	67.8
gray	32.2
yellow-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
BE9126	yellow-orange	darkgoldenrod	59.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.195
Mean Local Roughness	0.041
Roughness Uniformity	0.025
Edge Density	0.249
Mean Gradient Magnitude	0.359
Gradient Variance	0.095
Gradient Smoothness	0.14
Directional Coherence	0.009
Pattern Complexity	0.134
Pattern Repetition	1.0
Detail Frequency Ratio	0.644
Spatial Variation	0.134
Texture Consistency	0.674

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.512
Brightness Variance	0.195
Brightness Uniformity	0.619
Brightness Skewness	-0.239
Brightness Entropy	7.565
Rms Contrast	0.195
Michelson Contrast	1.0
Weber Contrast	0.67
Mean Local Contrast	0.047
Contrast Uniformity	0.43
Dynamic Range	1.0
Effective Dynamic Range	0.62
Shadow Percentage	22.947
Midtone Percentage	52.31
Highlight Percentage	24.743
Shadow Clipping	0.015
Highlight Clipping	0.02
Tonal Balance	0.286
Fine Contrast	0.022
Medium Contrast	0.058
Coarse Contrast	0.087
Multiscale Contrast Ratio	0.248
Edge Contrast	0.359
Contrast Clustering	0.326

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.719
Color Clustering	0.685
Color Transition Smoothness	0.092
Transition Uniformity	0.389
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.36
Saturation Variance	0.06
Low Saturation Ratio	0.365

Metric	Value
Medium Saturation Ratio	0.558
High Saturation Ratio	0.077
Saturation Clustering	0.999
Hue Concentration	0.975
Complementary Balance	0.01
Analogous Dominance	0.989
Temperature Bias	0.978

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). D Major9 - Research on Harmony - Variation 2 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0522.html

[2] Quercy, A. (2024). D Major9 - Research on Harmony - Variation 2 - Gallery. https://artquamanima.com/en/artworks/2024/01/d-major9-research-on-harmony-variation-2_5v8.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/11/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)

aad404cd6190ef6f097177df783b3491b0f7406f300b-ab2928e10ada71d6610b

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