AQC0559

Nanopublication — Computational Image Analysis - AQC0559

by Arnaud Quercy · C Major9 - Research on Harmony - Variation 11 · 2024

Claim 1: Computational Image Analysis - AQC0559

> Computational image analysis [3] of artwork C Major9 - Research [1] on Harmony - Variation 11 (AQC0559) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 2026-02-04.

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]: 1077x1436 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DC948F	20.9	red-orange	darksalmon
2		E15A47	19.9	red-orange	indianred
3		696076	14.1	violet	dusty mauve
4		7C7287	12.2	violet	dusty mauve
5		524B66	10.9	violet	dusty mauve
6		373354	8.3	violet	dusty mauve
7		93899E	5.5	violet	dusty mauve
8		1C1634	4.5	violet	very dark purple
9		D9B8BE	2.3	red	silver
10		AB6358	1.5	red-orange	burnt sienna
11		000414	0.3	blue-violet	black [Accent]
12		7A5A4D	0.3	orange	dimgray [Accent]

Color Families:

Family	%
violet	55.4
red-orange	42.3
red	2.3
blue-violet	0.3
orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
000414	blue-violet	black	8.2
7A5A4D	orange	dimgray	17.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.163
Mean Local Roughness	0.042
Roughness Uniformity	0.037
Edge Density	0.202
Mean Gradient Magnitude	0.341
Gradient Variance	0.133
Gradient Smoothness	0.0
Directional Coherence	0.035
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.678
Spatial Variation	0.12
Texture Consistency	0.7

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.466
Brightness Variance	0.163
Brightness Uniformity	0.649
Brightness Skewness	-0.41
Brightness Entropy	7.122
Rms Contrast	0.163
Michelson Contrast	1.0
Weber Contrast	0.649
Mean Local Contrast	0.046
Contrast Uniformity	0.158
Dynamic Range	0.984
Effective Dynamic Range	0.518
Shadow Percentage	19.995
Midtone Percentage	67.108
Highlight Percentage	12.896
Shadow Clipping	0.004
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.022
Medium Contrast	0.056
Coarse Contrast	0.072
Multiscale Contrast Ratio	0.311
Edge Contrast	0.341
Contrast Clustering	0.3

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.738
Color Clustering	0.661

Metric	Value
Color Transition Smoothness	0.081
Transition Uniformity	0.002
Sharp Transition Ratio	0.1
Transition Directionality	0.037
Mean Saturation	0.377
Saturation Variance	0.045
Low Saturation Ratio	0.392
Medium Saturation Ratio	0.534
High Saturation Ratio	0.074
Saturation Clustering	0.996
Hue Concentration	0.586
Complementary Balance	0.0
Analogous Dominance	0.657
Temperature Bias	0.476

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 11 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0559.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony-variation-11_69m.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)

`1ea4f425296d8d431ed73ed2e610a99abcafb6200556e7923c9a9d0790cbd5cf`

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