AQC0826

Nanopublication — Computational Image Analysis - AQC0826

by Arnaud Quercy · E Major - Research on Harmony - Variation 7 · 2025

Claim 1: Computational Image Analysis - AQC0826

> Computational image analysis [3] of artwork E Major [1] - Research on Harmony - Variation 7 (AQC0826) [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]: 2246x2995 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C4C6C8	23.6	white	silver
2		D5D7D6	18.6	white	lightgray
3		C1C96F	9.9	yellow	ochre
4		B5C0DE	9.1	blue-violet	lightsteelblue
5		CCCE97	8.5	yellow	tan
6		A2975E	8.0	yellow	ochre
7		B3A781	7.8	yellow	ochre
8		9CA8CA	7.3	blue-violet	steel gray
9		323020	3.9	yellow	darkslategray
10		847B46	3.3	yellow	olivedrab
11		545738	0.3	yellow-green	dark brown [Accent]
12		414658	0.3	violet	dusty mauve [Accent]
13		F0B189	0.3	orange	burlywood [Accent]
14		D39384	0.3	red-orange	darksalmon [Accent]
15		514C40	0.3	yellow-orange	dark brown [Accent]

Color Families:

Family	%
white	42.1
yellow	41.5
blue-violet	16.4
yellow-green	0.3
violet	0.3
orange	0.3
red-orange	0.3
yellow-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
545738	yellow-green	dark brown	19.3
414658	violet	dusty mauve	11.4
F0B189	orange	burlywood	34.1
D39384	red-orange	darksalmon	28.4
514C40	yellow-orange	dark brown	8.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.144
Mean Local Roughness	0.02
Roughness Uniformity	0.019
Edge Density	0.1
Mean Gradient Magnitude	0.168
Gradient Variance	0.043
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.112
Pattern Repetition	1.0
Detail Frequency Ratio	0.624
Spatial Variation	0.09
Texture Consistency	0.525

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.718
Brightness Variance	0.144
Brightness Uniformity	0.8
Brightness Skewness	-2.183
Brightness Entropy	6.682
Rms Contrast	0.144
Michelson Contrast	1.0
Weber Contrast	0.324
Mean Local Contrast	0.022
Contrast Uniformity	0.11
Dynamic Range	1.0
Effective Dynamic Range	0.396
Shadow Percentage	3.961
Midtone Percentage	18.988
Highlight Percentage	77.051
Shadow Clipping	0.002
Highlight Clipping	0.003
Tonal Balance	0.0
Fine Contrast	0.01
Medium Contrast	0.027
Coarse Contrast	0.043
Multiscale Contrast Ratio	0.243

Metric	Value
Edge Contrast	0.168
Contrast Clustering	0.475

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.747
Color Clustering	0.657
Color Transition Smoothness	0.587
Transition Uniformity	0.722
Sharp Transition Ratio	0.1
Transition Directionality	0.008
Mean Saturation	0.207
Saturation Variance	0.031
Low Saturation Ratio	0.709
Medium Saturation Ratio	0.288
High Saturation Ratio	0.003
Saturation Clustering	0.999
Hue Concentration	0.638
Complementary Balance	0.175
Analogous Dominance	0.824
Temperature Bias	0.301

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 (2025). E Major - Research on Harmony - Variation 7 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0826.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/e-major-research-on-harmony-variation-7_95g.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)

4373b6363341f651c83f91bef0b94b-f93a0c0e85f796762c25c6de6b52f9e1c9

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