AQC0782

Nanopublication — Computational Image Analysis - AQC0782

by Arnaud Quercy · Eb Major - Research on Harmony - Variation 4 · 2024

Claim 1: Computational Image Analysis - AQC0782

> Computational image analysis [3] of artwork Eb Major [1] - Research on Harmony - Variation 4 (AQC0782) [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]: 2292x3438 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C45F12	16.2	orange	chocolate
2		2F2B3F	13.6	violet	very dark gray
3		B7AEA0	13.0	yellow-orange	steel gray
4		161116	11.6	black	black
5		5D4767	10.2	red-violet	dusty mauve
6		A95E3B	9.3	orange	burnt sienna
7		CFC4C0	8.7	white	silver
8		CF7A54	6.5	orange	peru
9		6E598E	6.3	violet	dusty mauve
10		9B83C6	4.6	violet	mediumpurple
11		430500	0.3	red-orange	very dark red [Accent]
12		F8F2E1	0.3	yellow	white [Accent]
13		9E6572	0.3	red	gray [Accent]

Color Families:

Family	%
orange	31.9
violet	24.5
yellow-orange	13.0
black	11.6
red-violet	10.2
white	8.7
red-orange	0.3
yellow	0.3
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
430500	red-orange	very dark red	33.3
F8F2E1	yellow	white	9.1
9E6572	red	gray	25.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.218
Mean Local Roughness	0.016
Roughness Uniformity	0.015
Edge Density	0.092
Mean Gradient Magnitude	0.168
Gradient Variance	0.042
Gradient Smoothness	0.0
Directional Coherence	0.014
Pattern Complexity	0.114
Pattern Repetition	1.0
Detail Frequency Ratio	0.575
Spatial Variation	0.139
Texture Consistency	0.673

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.428
Brightness Variance	0.218
Brightness Uniformity	0.49
Brightness Skewness	-0.035
Brightness Entropy	7.617
Rms Contrast	0.218
Michelson Contrast	1.0
Weber Contrast	0.85
Mean Local Contrast	0.021
Contrast Uniformity	0.101
Dynamic Range	1.0
Effective Dynamic Range	0.706
Shadow Percentage	32.257
Midtone Percentage	48.889
Highlight Percentage	18.855
Shadow Clipping	0.003
Highlight Clipping	0.001
Tonal Balance	0.344
Fine Contrast	0.008
Medium Contrast	0.025
Coarse Contrast	0.048
Multiscale Contrast Ratio	0.164
Edge Contrast	0.168
Contrast Clustering	0.327

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.716
Color Clustering	0.65
Color Transition Smoothness	0.56
Transition Uniformity	0.707
Sharp Transition Ratio	0.1
Transition Directionality	0.019
Mean Saturation	0.432
Saturation Variance	0.077
Low Saturation Ratio	0.358
Medium Saturation Ratio	0.442
High Saturation Ratio	0.199
Saturation Clustering	0.999
Hue Concentration	0.516
Complementary Balance	0.008
Analogous Dominance	0.525
Temperature Bias	0.449

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). Eb Major - Research on Harmony - Variation 4 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0782.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/eb-major-research-on-harmony-variation-4_8oc.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)

440d11c0235f0ee291ce1a6f217acef2935f4ab3f16f9461e3c7b3d20761adb1

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