AQC0627

Nanopublication — Computational Image Analysis - AQC0627

by Arnaud Quercy · Eb Major - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0627

> Computational image analysis [3] of artwork Eb Major [1] - Research on Harmony - Variation 1 (AQC0627) [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]: 2337x3505 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		58545F	20.5	violet	dusty mauve
2		45404A	18.3	violet	dusty mauve
3		425589	15.8	blue-violet	grayish purple
4		726E76	10.2	violet	dusty mauve
5		5E73AE	8.8	blue-violet	grayish purple
6		BB5E09	8.8	orange	chocolate
7		DE7F25	5.1	orange	peru
8		E5E2D3	4.5	yellow	gainsboro
9		9C989D	4.0	gray	steel gray
10		221C15	3.9	orange	very dark gray
11		FBFCEC	0.3	yellow-green	white [Accent]
12		9F8666	0.3	yellow-orange	gray [Accent]

Color Families:

Family	%
violet	49.0
blue-violet	24.7
orange	17.7
yellow	4.5
gray	4.0
yellow-green	0.3
yellow-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
FBFCEC	yellow-green	white	8.5
9F8666	yellow-orange	gray	21.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.157
Mean Local Roughness	0.031
Roughness Uniformity	0.031
Edge Density	0.151
Mean Gradient Magnitude	0.271
Gradient Variance	0.113
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.112
Pattern Repetition	1.0
Detail Frequency Ratio	0.631
Spatial Variation	0.052
Texture Consistency	0.617

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.394
Brightness Variance	0.157
Brightness Uniformity	0.602
Brightness Skewness	1.394
Brightness Entropy	7.036
Rms Contrast	0.157
Michelson Contrast	1.0
Weber Contrast	0.556
Mean Local Contrast	0.035
Contrast Uniformity	0.135
Dynamic Range	1.0
Effective Dynamic Range	0.502
Shadow Percentage	37.723
Midtone Percentage	56.379
Highlight Percentage	5.898
Shadow Clipping	0.021
Highlight Clipping	0.028
Tonal Balance	0.0
Fine Contrast	0.016
Medium Contrast	0.045
Coarse Contrast	0.075
Multiscale Contrast Ratio	0.217
Edge Contrast	0.271
Contrast Clustering	0.383

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.744
Color Clustering	0.5

Metric	Value
Color Transition Smoothness	0.283
Transition Uniformity	0.257
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.339
Saturation Variance	0.087
Low Saturation Ratio	0.572
Medium Saturation Ratio	0.283
High Saturation Ratio	0.145
Saturation Clustering	0.999
Hue Concentration	0.315
Complementary Balance	0.073
Analogous Dominance	0.633
Temperature Bias	-0.147

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 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0627.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/eb-major-research-on-harmony-variation-1_702.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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3ce28aebbbce776c7cf7a1d9a4981c5d73bce120d-
ff527429640a11c9e930022
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Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240615-0123
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