AQC0875

Nanopublication — Computational Image Analysis - AQC0875

by Arnaud Quercy · Eb Major - Research on Harmony - Variations 5 · 2025

Claim 1: Computational Image Analysis - AQC0875

> Computational image analysis [3] of artwork Eb Major [1] - Research on Harmony - Variations 5 (AQC0875) [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 2025-12-11.

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]: 1985x2977 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DFBED5	17.4	red-violet	thistle
2		BB85B4	16.3	red-violet	rosybrown
3		A073A1	13.4	red-violet	dusty mauve
4		D19CCD	12.4	red-violet	plum
5		F0E2DF	9.2	red-orange	white
6		5E5352	9.0	gray	dimgray
7		786182	7.8	red-violet	dusty mauve
8		E8BF93	6.1	orange	burlywood
9		EC8316	4.3	orange	darkorange
10		2F2428	4.0	red	very dark gray
11		A7937B	0.3	yellow-orange	rosybrown [Accent]
12		8357B1	0.3	violet	slateblue [Accent]

Color Families:

Family	%
red-violet	67.3
orange	10.5
red-orange	9.2
gray	9.0
red	4.0
yellow-orange	0.3
violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
A7937B	yellow-orange	rosybrown	15.5
8357B1	violet	slateblue	54.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.192
Mean Local Roughness	0.036
Roughness Uniformity	0.032
Edge Density	0.182
Mean Gradient Magnitude	0.298
Gradient Variance	0.123
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.633
Spatial Variation	0.081
Texture Consistency	0.863

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.622
Brightness Variance	0.192
Brightness Uniformity	0.691
Brightness Skewness	-0.52
Brightness Entropy	7.525
Rms Contrast	0.192
Michelson Contrast	1.0
Weber Contrast	0.585
Mean Local Contrast	0.04
Contrast Uniformity	0.179
Dynamic Range	1.0
Effective Dynamic Range	0.612
Shadow Percentage	7.884
Midtone Percentage	48.055
Highlight Percentage	44.061
Shadow Clipping	0.001
Highlight Clipping	0.002
Tonal Balance	0.209
Fine Contrast	0.019
Medium Contrast	0.049
Coarse Contrast	0.077
Multiscale Contrast Ratio	0.252
Edge Contrast	0.298
Contrast Clustering	0.137

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.708
Color Clustering	0.532

Metric	Value
Color Transition Smoothness	0.252
Transition Uniformity	0.208
Sharp Transition Ratio	0.1
Transition Directionality	0.009
Mean Saturation	0.274
Saturation Variance	0.03
Low Saturation Ratio	0.637
Medium Saturation Ratio	0.317
High Saturation Ratio	0.046
Saturation Clustering	0.999
Hue Concentration	0.788
Complementary Balance	0.0
Analogous Dominance	0.778
Temperature Bias	0.569

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). Eb Major - Research on Harmony - Variations 5 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0875.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/eb-major-research-on-harmony-variations-5_i1b.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)

`0c37410c274cbf05d338363d38bdc20f6272b-cc36489a596cf409cf34f8d7751`

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20251123-0108
Asset code	AQC0875
Version	1
Published	2026-03-25

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-03-27

Persistent URI: https://multimodal.institute/en/nanopubs/2026/03/AQC0875-computational-image-analysis-aqc0875.pdf