AQC0731

Nanopublication — Computational Image Analysis - AQC0731

by Arnaud Quercy · E Major - Research on Harmony - Variation 2 · 2024

Claim 1: Computational Image Analysis - AQC0731

> Computational image analysis [3] of artwork E Major [1] - Research on Harmony - Variation 2 (AQC0731) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		574534	15.4	orange	dark brown
2		EBA222	13.0	yellow-orange	goldenrod
3		719DC6	11.9	blue-violet	cornflowerblue
4		37291E	11.7	orange	very dark gray
5		5888B5	11.3	blue-violet	grayish purple
6		6A5A49	10.5	orange	dimgray
7		5A616A	10.1	blue-violet	grayish purple
8		7E7A71	9.5	yellow-orange	gray
9		CBA042	4.9	yellow-orange	peru
10		E3C27C	1.6	yellow-orange	burlywood
11		E2D8AB	0.3	yellow	palegoldenrod [Accent]
12		11142A	0.3	violet	very dark purple [Accent]
13		7E9896	0.3	green	lightslategray [Accent]

Color Families:

Family	%
orange	37.6
blue-violet	33.3
yellow-orange	29.1
yellow	0.3
violet	0.3
green	0.3

Accent Colors:

Hex	Family	Name	Chroma
E2D8AB	yellow	palegoldenrod	23.3
11142A	violet	very dark purple	16.2
7E9896	green	lightslategray	10.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.166
Mean Local Roughness	0.027
Roughness Uniformity	0.023
Edge Density	0.139
Mean Gradient Magnitude	0.198
Gradient Variance	0.053
Gradient Smoothness	0.0
Directional Coherence	0.014
Pattern Complexity	0.129
Pattern Repetition	1.0
Detail Frequency Ratio	0.667
Spatial Variation	0.111
Texture Consistency	0.577

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.444
Brightness Variance	0.166
Brightness Uniformity	0.626
Brightness Skewness	-0.042
Brightness Entropy	7.255
Rms Contrast	0.166
Michelson Contrast	1.0
Weber Contrast	0.694
Mean Local Contrast	0.027
Contrast Uniformity	0.172
Dynamic Range	1.0
Effective Dynamic Range	0.514
Shadow Percentage	29.117
Midtone Percentage	60.438
Highlight Percentage	10.446
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.052
Fine Contrast	0.015
Medium Contrast	0.034
Coarse Contrast	0.044
Multiscale Contrast Ratio	0.349
Edge Contrast	0.198
Contrast Clustering	0.423

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.716
Color Clustering	0.426
Color Transition Smoothness	0.478
Transition Uniformity	0.629
Sharp Transition Ratio	0.1
Transition Directionality	0.015
Mean Saturation	0.437
Saturation Variance	0.055
Low Saturation Ratio	0.265
Medium Saturation Ratio	0.581
High Saturation Ratio	0.154
Saturation Clustering	0.999
Hue Concentration	0.345
Complementary Balance	0.325
Analogous Dominance	0.674
Temperature Bias	0.349

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). E Major - Research on Harmony - Variation 2 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0731.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/e-major-research-on-harmony-variation-2_84i.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)

e726ced3d7c3716c63101efedcdf386cd9636c1ee-b258cb4d3a1c56a9e12621c

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20241201-0228
Asset code	AQC0731
Version	1
Published	2026-04-09

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

Date of publication: 2026-04-09

Persistent URI: https://multimodal.institute/en/nanopubs/2026/02/AQC0731-computational-image-analysis-aqc0731.pdf