AQC0633

Nanopublication — Computational Image Analysis - AQC0633

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

Claim 1: Computational Image Analysis - AQC0633

> Computational image analysis [3] of artwork E Major [1] - Research on Harmony - Variation 1 (AQC0633) [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]: 2340x3510 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E9C02A	26.0	yellow-orange	goldenrod
2		221910	10.7	orange	very dark gray
3		413A2B	10.3	yellow-orange	darkslategray
4		A8C43B	10.0	yellow-green	yellowgreen
5		4A7FA9	9.8	blue-violet	grayish purple
6		346789	8.9	blue-violet	grayish purple
7		1F4156	8.3	blue	grayish purple
8		6EA3A3	5.5	blue-green	cadetblue
9		E0CDAA	5.3	yellow-orange	wheat
10		63614E	5.1	yellow	dimgray
11		90C8B2	0.3	green	darkseagreen [Accent]

Color Families:

Family	%
yellow-orange	41.7
blue-violet	18.8
orange	10.7
yellow-green	10.0
blue	8.3
blue-green	5.5
yellow	5.1
green	0.3

Accent Colors:

Hex	Family	Name	Chroma
90C8B2	green	darkseagreen	23.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.241
Mean Local Roughness	0.022
Roughness Uniformity	0.023
Edge Density	0.108
Mean Gradient Magnitude	0.196
Gradient Variance	0.068
Gradient Smoothness	0.0
Directional Coherence	0.007
Pattern Complexity	0.113
Pattern Repetition	1.0
Detail Frequency Ratio	0.618
Spatial Variation	0.173
Texture Consistency	0.617

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.485
Brightness Variance	0.241
Brightness Uniformity	0.504
Brightness Skewness	-0.183
Brightness Entropy	7.534
Rms Contrast	0.241
Michelson Contrast	1.0
Weber Contrast	0.794
Mean Local Contrast	0.026
Contrast Uniformity	0.047
Dynamic Range	1.0
Effective Dynamic Range	0.686
Shadow Percentage	32.555
Midtone Percentage	29.793
Highlight Percentage	37.652
Shadow Clipping	0.013
Highlight Clipping	0.001
Tonal Balance	0.17
Fine Contrast	0.011
Medium Contrast	0.032
Coarse Contrast	0.053
Multiscale Contrast Ratio	0.213
Edge Contrast	0.196
Contrast Clustering	0.383

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.752
Color Clustering	0.632

Metric	Value
Color Transition Smoothness	0.469
Transition Uniformity	0.502
Sharp Transition Ratio	0.1
Transition Directionality	0.006
Mean Saturation	0.595
Saturation Variance	0.043
Low Saturation Ratio	0.099
Medium Saturation Ratio	0.516
High Saturation Ratio	0.385
Saturation Clustering	0.998
Hue Concentration	0.359
Complementary Balance	0.196
Analogous Dominance	0.634
Temperature Bias	0.173

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 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0633.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/e-major-research-on-harmony-variation-1_72e.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)

1e440dc4da828eeb9955a9f610ba76a6f397d59396a132752706d8ae-b09148bb

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