AQC0943

Nanopublication — Computational Image Analysis - AQC0943

by Arnaud Quercy · E Major - Research on Harmony - Variations 11 · 2025

Claim 1: Computational Image Analysis - AQC0943

> Computational image analysis [3] of artwork E Major [1] - Research on Harmony - Variations 11 (AQC0943) [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]: 1912x2677 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		1161BE	21.7	blue-violet	royalblue
2		F1E1AF	18.5	yellow-orange	wheat
3		0B1629	15.6	blue-violet	very dark indigo
4		068EE3	13.2	blue-violet	dodgerblue
5		2D74CB	9.0	blue-violet	steelblue
6		26303C	7.8	blue-violet	darkslategray
7		D7DAD5	6.3	white	lightgray
8		EFD839	3.2	yellow	gold
9		5CA1E6	2.9	blue-violet	cornflowerblue
10		929D5D	1.8	yellow-green	gray
11		62C8F7	0.3	blue	lightskyblue [Accent]
12		0E326E	0.3	violet	indigo [Accent]
13		675D53	0.3	orange	dimgray [Accent]

Color Families:

Family	%
blue-violet	70.2
yellow-orange	18.5
white	6.3
yellow	3.2
yellow-green	1.8
blue	0.3
violet	0.3
orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
62C8F7	blue	lightskyblue	35.8
0E326E	violet	indigo	40.2
675D53	orange	dimgray	7.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.283
Mean Local Roughness	0.023
Roughness Uniformity	0.024
Edge Density	0.09
Mean Gradient Magnitude	0.181
Gradient Variance	0.074
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.624
Spatial Variation	0.18
Texture Consistency	0.669

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.464
Brightness Variance	0.283
Brightness Uniformity	0.391
Brightness Skewness	0.333
Brightness Entropy	7.161
Rms Contrast	0.283
Michelson Contrast	1.0
Weber Contrast	0.893
Mean Local Contrast	0.024
Contrast Uniformity	0.0
Dynamic Range	0.996
Effective Dynamic Range	0.82
Shadow Percentage	34.252
Midtone Percentage	36.906
Highlight Percentage	28.842
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.031
Coarse Contrast	0.047
Multiscale Contrast Ratio	0.276
Edge Contrast	0.181
Contrast Clustering	0.331

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.759
Color Clustering	0.557
Color Transition Smoothness	0.517
Transition Uniformity	0.503
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.637
Saturation Variance	0.101
Low Saturation Ratio	0.29
Medium Saturation Ratio	0.14
High Saturation Ratio	0.57
Saturation Clustering	0.998
Hue Concentration	0.486
Complementary Balance	0.107
Analogous Dominance	0.738
Temperature Bias	-0.485

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). E Major - Research on Harmony - Variations 11 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0943.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/12/e-major-research-on-harmony-variations-11_1i4v.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)

a102d243e764f4022a7dde15498b366d8c63d8f6793ab8f39c681ff68613e-f84

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