

Nanopublication — Computational Image Analysis - AQC0939

by Arnaud Quercy · Ab Major - Research on Harmony - Variations 14 · 2025












Claim 1: Computational Image Analysis - AQC0939

The artwork Ab Major [1] - Research on Harmony - Variations 14 (AQC0939) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

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]: 1978x2770 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		26.5996	19.4 blue-violet	grayish purple
2		21.1A32	18.0 violet	very dark purple
3		1A0D0D	17.7 red-orange	black
4		E7290F	9.7 red-orange	orangered
5		AC78B6	8.7 red-violet	dusty mauve
6		EEB7A3	7.7 orange	burlywood
7		DEB8C6	5.6 red	thistle
8		443A52	5.3 violet	dusty mauve
9		0696DD	4.9 blue-violet	dodgerblue
10		F3E8D0	3.0 yellow-orange	antiquewhite
11		37B0E8	0.3 blue	mediumturquoise [Accent]

Color Families:

Family	%
red-orange	27.5
blue-violet	24.3
violet	23.3
red-violet	8.7
orange	7.7
red	5.6
yellow-orange	3.0
blue	0.3

Accent Colors:

Hex	Family Name	Chroma
37B0E8	blue	mediumturquoise 39.9

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.252
Mean Local Roughness	0.02
Roughness Uniformity	0.023
Edge Density	0.062
Mean Gradient Magnitude	0.161
Gradient Variance	0.072
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.611
Spatial Variation	0.151
Texture Consistency	0.681

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.348
Brightness Variance	0.252
Brightness Uniformity	0.275
Brightness Skewness	0.681
Brightness Entropy	7.349
Rms Contrast	0.252
Michelson Contrast	1.0
Weber Contrast	0.915
Mean Local Contrast	0.021
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.745
Shadow Percentage	55.808
Midtone Percentage	27.935
Highlight Percentage	16.257
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.004
Fine Contrast	0.01
Medium Contrast	0.027
Coarse Contrast	0.044
Multiscale Contrast Ratio	0.229
Edge Contrast	0.161
Contrast Clustering	0.319

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.729
Color Clustering	0.523

Metric	Value
Color Transition Smoothness	0.553
Transition Uniformity	0.479
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.582
Saturation Variance	0.068
Low Saturation Ratio	0.159
Medium Saturation Ratio	0.461
High Saturation Ratio	0.38
Saturation Clustering	0.998
Hue Concentration	0.39
Complementary Balance	0.066
Analogous Dominance	0.481
Temperature Bias	0.011

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). Ab Major - Research on Harmony - Variations 14 — Catalogue raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0939.html>
- [2] Quercy, A. (2025). Ab Major - Research on Harmony - Variations 14 - Gallery. https://artquamanima.com/en/artworks/2025/12/ab-major-research-on-harmony-variations-14_1i2b.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)

310a77531fab6f2064f36f17afbfbab42c3e40c500e7d73b-b2a644aff84541f31

Artist Arnaud Quercy

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