AQC0645

Nanopublication — Computational Image Analysis - AQC0645

by Arnaud Quercy · Ab Major - Research on Harmony - Variation 5 · 2024

Claim 1: Computational Image Analysis - AQC0645

> The artwork Ab Major [1] - Research on Harmony - Variation 5 (AQC0645) [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]: 1907x2860 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C93023	17.5	red-orange	firebrick
2		4C4948	13.4	gray	darkslategray
3		442830	12.7	red	darkslategrey
4		98B7C4	11.0	blue	steel gray
5		E54334	9.8	red-orange	tomato
6		B3CFD7	9.3	blue-green	lightsteelblue
7		872213	9.0	red-orange	russet
8		180604	7.1	red-orange	black
9		746469	6.7	red	dimgray
10		A27B71	3.4	red-orange	gray
11		B9A196	0.3	orange	rosybrown [Accent]
12		567AAF	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
red-orange	46.8
red	19.4
gray	13.4
blue	11.0
blue-green	9.3
orange	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
B9A196	orange	rosybrown	11.4
567AAF	blue-violet	grayish purple	32.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.208
Mean Local Roughness	0.022
Roughness Uniformity	0.02
Edge Density	0.11
Mean Gradient Magnitude	0.187
Gradient Variance	0.054
Gradient Smoothness	0.0
Directional Coherence	0.021
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.619
Spatial Variation	0.151
Texture Consistency	0.517

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.392
Brightness Variance	0.208
Brightness Uniformity	0.469
Brightness Skewness	0.503
Brightness Entropy	7.367
Rms Contrast	0.208
Michelson Contrast	1.0
Weber Contrast	0.765
Mean Local Contrast	0.025
Contrast Uniformity	0.156
Dynamic Range	1.0
Effective Dynamic Range	0.725
Shadow Percentage	42.954
Midtone Percentage	38.663
Highlight Percentage	18.383
Shadow Clipping	0.025
Highlight Clipping	0.001
Tonal Balance	0.075
Fine Contrast	0.011
Medium Contrast	0.031
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.187
Contrast Clustering	0.483

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.781
Color Clustering	0.563

Metric	Value
Color Transition Smoothness	0.532
Transition Uniformity	0.638
Sharp Transition Ratio	0.1
Transition Directionality	0.026
Mean Saturation	0.492
Saturation Variance	0.1
Low Saturation Ratio	0.394
Medium Saturation Ratio	0.198
High Saturation Ratio	0.408
Saturation Clustering	0.998
Hue Concentration	0.66
Complementary Balance	0.147
Analogous Dominance	0.833
Temperature Bias	0.669

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). Ab Major - Research on Harmony - Variation 5 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0645.html

[2] Quercy, A. (2024). Ab Major - Research on Harmony - Variation 5 - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony-variation-5_772.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)

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