AQC0947

Nanopublication — Computational Image Analysis - AQC0947

by Arnaud Quercy · F Major - Research on Harmony - Variations 12 · 2025

Claim 1: Computational Image Analysis - AQC0947

> Analysis record [3]: F Major [1] - Research on Harmony - Variations 12 (AQC0947) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 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]: 1902x2662 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		724641	22.2	red-orange	dark brown
2		F54708	16.6	orange	orangered
3		DAA147	16.0	yellow-orange	peru
4		241619	10.7	red	black
5		B61D2A	8.0	red-orange	firebrick
6		EFB9C5	7.1	red	lightpink
7		C39062	7.1	orange	ochre
8		E5E5E3	4.7	white	white
9		976754	4.0	orange	burnt sienna
10		D56F35	3.6	orange	chocolate

Color Families:

Family	%
orange	31.3
red-orange	30.2
red	17.8
yellow-orange	16.0
white	4.7

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.215
Mean Local Roughness	0.023
Roughness Uniformity	0.023
Edge Density	0.068
Mean Gradient Magnitude	0.166
Gradient Variance	0.065
Gradient Smoothness	0.0
Directional Coherence	0.004
Pattern Complexity	0.126
Pattern Repetition	1.0
Detail Frequency Ratio	0.627
Spatial Variation	0.125
Texture Consistency	0.597

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.469
Brightness Variance	0.215
Brightness Uniformity	0.542
Brightness Skewness	0.149
Brightness Entropy	7.379
Rms Contrast	0.215
Michelson Contrast	1.0
Weber Contrast	0.797
Mean Local Contrast	0.023
Contrast Uniformity	0.018
Dynamic Range	1.0
Effective Dynamic Range	0.722
Shadow Percentage	30.533
Midtone Percentage	50.051
Highlight Percentage	19.415
Shadow Clipping	0.0
Highlight Clipping	0.006
Tonal Balance	0.036
Fine Contrast	0.014
Medium Contrast	0.029
Coarse Contrast	0.046
Multiscale Contrast Ratio	0.309
Edge Contrast	0.166
Contrast Clustering	0.403

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.751
Color Clustering	0.521
Color Transition Smoothness	0.571
Transition Uniformity	0.559
Sharp Transition Ratio	0.1
Transition Directionality	0.005
Mean Saturation	0.57
Saturation Variance	0.076
Low Saturation Ratio	0.174
Medium Saturation Ratio	0.484
High Saturation Ratio	0.342
Saturation Clustering	0.999

Metric	Value
Hue Concentration	0.934
Complementary Balance	0.0
Analogous Dominance	0.978
Temperature Bias	0.985

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). F Major - Research on Harmony - Variations 12 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0947.html

[2] Quercy, A. (2025). F Major - Research on Harmony - Variations 12 - Gallery. https://artquamanima.com/en/artworks/2025/12/f-major-research-on-harmony-variations-12_1i7f.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)

25fb574c9f3d9f581839edf1b1ea33e2f41aa5e6acb-fa34a27c8624f73a237f7

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