AQC0837

Nanopublication — Computational Image Analysis - AQC0837

by Arnaud Quercy · G Major - Research on Harmony - Variation 4 · 2025

Claim 1: Computational Image Analysis - AQC0837

> Computational image analysis [3] of artwork G Major [1] - Research on Harmony - Variation 4 (AQC0837) [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]: 2434x3246 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C4D0B0	23.0	yellow-green	silver
2		B6C39F	20.6	yellow-green	steel gray
3		A7B48E	16.0	yellow-green	darkseagreen
4		D4DEC3	12.2	yellow-green	lightgray
5		949F7C	9.7	yellow-green	gray
6		B6872D	5.4	yellow-orange	peru
7		986E19	4.6	yellow-orange	burnt sienna
8		CC9E46	3.5	yellow-orange	goldenrod
9		788260	3.1	yellow-green	dimgray
10		2B2818	1.8	yellow	very dark gray
11		794708	0.3	orange	russet [Accent]
12		E0AC9D	0.3	red-orange	tan [Accent]

Color Families:

Family	%
yellow-green	84.7
yellow-orange	13.5
yellow	1.8
orange	0.3
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
794708	orange	russet	45.3
E0AC9D	red-orange	tan	22.7

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.135
Mean Local Roughness	0.023
Roughness Uniformity	0.017
Edge Density	0.144
Mean Gradient Magnitude	0.189
Gradient Variance	0.036
Gradient Smoothness	0.0
Directional Coherence	0.004
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.628
Spatial Variation	0.075
Texture Consistency	0.614

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.693
Brightness Variance	0.135
Brightness Uniformity	0.805
Brightness Skewness	-1.502
Brightness Entropy	6.897
Rms Contrast	0.135
Michelson Contrast	1.0
Weber Contrast	0.37
Mean Local Contrast	0.025
Contrast Uniformity	0.342
Dynamic Range	1.0
Effective Dynamic Range	0.396
Shadow Percentage	1.952
Midtone Percentage	30.886
Highlight Percentage	67.161
Shadow Clipping	0.005
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.031
Coarse Contrast	0.046
Multiscale Contrast Ratio	0.289
Edge Contrast	0.189
Contrast Clustering	0.386

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.706
Color Clustering	0.424

Metric	Value
Color Transition Smoothness	0.537
Transition Uniformity	0.765
Sharp Transition Ratio	0.1
Transition Directionality	0.005
Mean Saturation	0.263
Saturation Variance	0.046
Low Saturation Ratio	0.81
Medium Saturation Ratio	0.088
High Saturation Ratio	0.102
Saturation Clustering	0.999
Hue Concentration	0.941
Complementary Balance	0.0
Analogous Dominance	0.996
Temperature Bias	0.337

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). G Major - Research on Harmony - Variation 4 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0837.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/g-major-research-on-harmony-variation-4_99q.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)

5c8a6227c3d58dd7b5c38a6acb034a01a30ab1bdce753a9e25080b2dcd-cd93b0

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