AQC0762

Nanopublication — Computational Image Analysis - AQC0762

by Arnaud Quercy · G Minor - Research on Harmony - Variation 5 · 2024

Claim 1: Computational Image Analysis - AQC0762

> Computational image analysis [3] of artwork G Minor [1] - Research on Harmony - Variation 5 (AQC0762) [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]: 2955x3940 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DAB381	16.0	yellow-orange	burlywood
2		B2A99D	14.8	yellow-orange	steel gray
3		1E191D	14.6	gray	very dark gray
4		B19BC9	12.3	violet	steel gray
5		CBBCAF	9.8	orange	silver
6		C0432A	9.6	red-orange	burnt sienna
7		DB8121	9.0	orange	chocolate
8		E3933B	9.0	orange	peru
9		4F3B68	3.1	violet	dusty mauve
10		8F4C2A	1.8	orange	burnt sienna
11		DEE1F3	0.3	blue-violet	lavender [Accent]
12		BA7696	0.3	red	dusty mauve [Accent]
13		9E7998	0.3	red-violet	dusty mauve [Accent]

Color Families:

Family	%
yellow-orange	30.8
orange	29.5
violet	15.4
gray	14.6
red-orange	9.6
blue-violet	0.3
red	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
DEE1F3	blue-violet	lavender	9.2
BA7696	red	dusty mauve	31.6
9E7998	red-violet	dusty mauve	22.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.219
Mean Local Roughness	0.012
Roughness Uniformity	0.013
Edge Density	0.038
Mean Gradient Magnitude	0.116
Gradient Variance	0.028
Gradient Smoothness	0.0
Directional Coherence	0.023
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.589
Spatial Variation	0.175
Texture Consistency	0.483

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.547
Brightness Variance	0.219
Brightness Uniformity	0.599
Brightness Skewness	-1.047
Brightness Entropy	6.956
Rms Contrast	0.219
Michelson Contrast	1.0
Weber Contrast	0.842
Mean Local Contrast	0.015
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.667
Shadow Percentage	17.954
Midtone Percentage	42.073
Highlight Percentage	39.973
Shadow Clipping	0.001
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.018
Coarse Contrast	0.032
Multiscale Contrast Ratio	0.182
Edge Contrast	0.116
Contrast Clustering	0.517

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.777
Color Clustering	0.661
Color Transition Smoothness	0.707
Transition Uniformity	0.809
Sharp Transition Ratio	0.1
Transition Directionality	0.03
Mean Saturation	0.4
Saturation Variance	0.08
Low Saturation Ratio	0.495
Medium Saturation Ratio	0.23
High Saturation Ratio	0.275
Saturation Clustering	1.0
Hue Concentration	0.68
Complementary Balance	0.001
Analogous Dominance	0.765
Temperature Bias	0.766

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). G Minor - Research on Harmony - Variation 5 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0762.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/g-minor-research-on-harmony-variation-5_8gk.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)

c3350e257306ae358c9288f6e21c9b828f3ab7dc00d31b91070045d73da9d-c0b

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