

Nanopublication — Computational Image Analysis - AQC0954

by Arnaud Quercy · G minor 7 - Research on Harmony · 2026

Claim 1: Computational Image Analysis - AQC0954

K-means clustering analysis [3] (10 colors) performed on artwork G minor 7 - Research [1] on Harmony (AQC0954) [2] by Arnaud Quercy [2] on 2026-03-05. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 1846x2769 pixels. Analysis date: 2026-03-05.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E3AA83	23.1	orange	burlywood
2		E0916A	16.9	orange	darksalmon
3		D07A59	11.4	orange	peru
4		47404E	10.2	violet	dusty mauve
5		695765	8.3	red-violet	dusty mauve
6		B0AEAF	7.5	gray	steel gray
7		C3C5C6	6.6	white	silver
8		29292D	6.5	gray	very dark gray
9		F0C8A7	4.9	orange	wheat
10		8D7A82	4.6	red	dusty mauve
11		310D0B	0.3	red-orange	very dark red [Accent]
12		FDE9CB	0.3	yellow-orange	blanchedalmond [Accent]
13		ECE9DF	0.3	yellow	white [Accent]

Color Families:

Family	%
orange	56.3
gray	14.0
violet	10.2
red-violet	8.3
white	6.6
red	4.6
red-orange	0.3
yellow-orange	0.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
310D0B	red-orange	very dark red	20.1

Hex	Family	Name	Chroma
FDE9CB	yellow-orange	blanchedalmond	17.1
ECE9DF	yellow	white	5.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.195
Mean Local Roughness	0.037
Roughness Uniformity	0.031
Edge Density	0.21
Mean Gradient Magnitude	0.279
Gradient Variance	0.091
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.683
Spatial Variation	0.15
Texture Consistency	0.564

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.574
Brightness Variance	0.195
Brightness Uniformity	0.661
Brightness Skewness	-0.853
Brightness Entropy	7.266
Rms Contrast	0.195
Michelson Contrast	1.0
Weber Contrast	0.668
Mean Local Contrast	0.039
Contrast Uniformity	0.227
Dynamic Range	1.0
Effective Dynamic Range	0.592
Shadow Percentage	18.06
Midtone Percentage	37.074
Highlight Percentage	44.866
Shadow Clipping	0.002
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.021
Medium Contrast	0.047
Coarse Contrast	0.06
Multiscale Contrast Ratio	0.356
Edge Contrast	0.279
Contrast Clustering	0.436

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.774
Color Clustering	0.752
Color Transition Smoothness	0.285
Transition Uniformity	0.366
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.325
Saturation Variance	0.038
Low Saturation Ratio	0.444
Medium Saturation Ratio	0.554
High Saturation Ratio	0.002
Saturation Clustering	0.999
Hue Concentration	0.839
Complementary Balance	0.019
Analogous Dominance	0.888
Temperature Bias	0.877

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 (2026). G minor 7 - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0954.html>
- [2] Quercy, A. (2026). F7 - Research on Harmony - Gallery. https://artquamanima.com/en/artworks/2026/03/g-minor-7-research-on-harmony_1yj4.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 <https://multimodal.institute/en/publications/2025/10/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)

801018f40f90afe-
b468452405ff9f589c7e741978c8e20b23b9e879f3a6ca8cf

Artist	Arnaud Quercy
Date	2026
Collection	Synesthetic Explorations
Certificate	20260305-0006
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