

Nanopublication — Computational Image Analysis - AQC0956

by Arnaud Quercy · C Minor M7 - Research on Harmony · 2026

Claim 1: Computational Image Analysis - AQC0956

K-means clustering analysis [3] (10 colors) performed on artwork C Minor [1] M7 - Research on Harmony (AQC0956) [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	D8D4C3	22.2	yellow	lightgray
2	B3B6B8	16.5	gray	silver
3	3C7140	13.2	yellow-green	dark brown
4	2F3531	10.0	gray	darkslategray
5	9A969A	8.1	gray	steel gray
6	BBC767	7.5	yellow-green	ochre
7	EDEBE0	6.8	yellow	white
8	889A10	6.6	yellow	olive
9	637A62	5.5	yellow-green	dimgray
10	8D97CF	3.6	violet	mediumpurple
11	B7629F	0.3	red-violet	palevioletred [Accent]
12	1C1811	0.3	orange	black [Accent]
13	111A23	0.3	blue	black [Accent]
14	6C7593	0.3	blue-violet	grayish purple [Accent]
15	9D667D	0.3	red	dusty mauve [Accent]

Color Families:

Family	%
yellow	35.6
gray	34.5
yellow-green	26.2
violet	3.6
red-violet	0.3
orange	0.3
blue	0.3
blue-violet	0.3
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
B7629F	red-violet	palevioletred	45.7
1C1811	orange	black	5.4
111A23	blue	black	7.3
6C7593	blue-violet	grayish purple	17.5
9D667D	red	dusty mauve	26.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.222
Mean Local Roughness	0.036
Roughness Uniformity	0.033
Edge Density	0.178
Mean Gradient Magnitude	0.28
Gradient Variance	0.124
Gradient Smoothness	0.0
Directional Coherence	0.007
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.659
Spatial Variation	0.107
Texture Consistency	0.702

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.617
Brightness Variance	0.222
Brightness Uniformity	0.639
Brightness Skewness	-0.533
Brightness Entropy	7.646
Rms Contrast	0.222
Michelson Contrast	1.0
Weber Contrast	0.668
Mean Local Contrast	0.04
Contrast Uniformity	0.083
Dynamic Range	1.0
Effective Dynamic Range	0.694
Shadow Percentage	13.52
Midtone Percentage	35.648
Highlight Percentage	50.832
Shadow Clipping	0.0
Highlight Clipping	0.006
Tonal Balance	0.315
Fine Contrast	0.019
Medium Contrast	0.048
Coarse Contrast	0.063
Multiscale Contrast Ratio	0.302

Metric	Value
Edge Contrast	0.28
Contrast Clustering	0.298

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.727
Color Clustering	0.747
Color Transition Smoothness	0.289
Transition Uniformity	0.154
Sharp Transition Ratio	0.1
Transition Directionality	0.008
Mean Saturation	0.248
Saturation Variance	0.063
Low Saturation Ratio	0.663
Medium Saturation Ratio	0.262
High Saturation Ratio	0.074
Saturation Clustering	0.999
Hue Concentration	0.628
Complementary Balance	0.092
Analogous Dominance	0.774
Temperature Bias	-0.457

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). C Minor M7 - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0956.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2026/03/c-minor-m7-research-on-harmony_1yjwt.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)

d5c04c1c7d9a454c454cbda6b51e07b-ca5f6d815ad518e6a38a235e3c0f8a6f2

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