

Nanopublication — Computational Image Analysis - AQC0691

by Arnaud Quercy · Ab minor - Research on Harmony - Variation 4 · 2024

Claim 1: Computational Image Analysis - AQC0691

The artwork Ab minor - Research [1] on Harmony - Variation 4 (AQC0691) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

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]: 2281x2281 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	33446C	23.2	blue-violet	grayish purple
2	4C5E6D	18.3	blue	grayish purple
3	2C2A3F	15.7	violet	very dark gray
4	847078	14.5	red	dusty mauve
5	544539	13.1	orange	dark brown
6	5A6B7F	6.5	blue-violet	grayish purple
7	6E6558	5.0	yellow-orange	dimgray
8	F1D672	1.4	yellow-orange	khaki
9	CEAC47	1.3	yellow-orange	peru
10	B9B2A7	1.1	yellow-orange	steel gray
11	F8EDA0	0.3	yellow	palegoldenrod [Accent]
12	E7CBC4	0.3	red-orange	lightgray [Accent]

Color Families:

Family	%
blue-violet	29.7
blue	18.3
violet	15.7
red	14.5
orange	13.1
yellow-orange	8.7
yellow	0.3
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
F8EDA0	yellow	palegoldenrod	39.6
E7CBC4	red-orange	lightgray	11.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.124
Mean Local Roughness	0.006
Roughness Uniformity	0.016
Edge Density	0.013
Mean Gradient Magnitude	0.045
Gradient Variance	0.017
Gradient Smoothness	0.0
Directional Coherence	0.259
Pattern Complexity	0.102
Pattern Repetition	1.0
Detail Frequency Ratio	0.676
Spatial Variation	0.097
Texture Consistency	0.133

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.335
Brightness Variance	0.124
Brightness Uniformity	0.629
Brightness Skewness	1.367
Brightness Entropy	6.48
Rms Contrast	0.124
Michelson Contrast	1.0
Weber Contrast	0.605
Mean Local Contrast	0.006
Contrast Uniformity	0.0
Dynamic Range	0.984
Effective Dynamic Range	0.337
Shadow Percentage	52.244
Midtone Percentage	44.768
Highlight Percentage	2.989
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.004
Medium Contrast	0.008
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.045
Contrast Clustering	0.867

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.825
Color Clustering	0.444

Metric	Value
Color Transition Smoothness	0.874
Transition Uniformity	0.893
Sharp Transition Ratio	0.1
Transition Directionality	0.275
Mean Saturation	0.343
Saturation Variance	0.019
Low Saturation Ratio	0.412
Medium Saturation Ratio	0.584
High Saturation Ratio	0.004
Saturation Clustering	1.0
Hue Concentration	0.485
Complementary Balance	0.198
Analogous Dominance	0.7
Temperature Bias	-0.259

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). Ab minor - Research on Harmony - Variation 4 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0691.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-minor-research-on-harmony-variation-4_7oy.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <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)

7cb524fb3435a1084d6eb71072da5291a2e1a8f6f67830fafe4f445ecf-b56c33

Artist Arnaud Quercy

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