AQC0847

Nanopublication — Computational Image Analysis - AQC0847

by Arnaud Quercy · Ab Minor - Research on Harmony - Variation 6 · 2025

Claim 1: Computational Image Analysis - AQC0847

> Computational image analysis [3] of artwork Ab Minor [1] - Research on Harmony - Variation 6 (AQC0847) [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]: 2363x3151 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D0D3CE	38.0	white	lightgray
2		C4C8C5	26.4	white	silver
3		DED196	6.7	yellow	burlywood
4		9AB779	5.9	yellow-green	darkseagreen
5		C2BA7D	5.7	yellow	ochre
6		5B3E5C	4.4	red-violet	dusty mauve
7		83A366	4.0	yellow-green	gray
8		7B567E	3.8	red-violet	dusty mauve
9		2A2D2B	3.1	gray	very dark gray
10		A3A7AF	2.0	blue-violet	steel gray
11		6E6650	0.3	yellow-orange	dimgray [Accent]
12		D48E6A	0.3	orange	darksalmon [Accent]
13		6F8F83	0.3	green	blue gray [Accent]

Color Families:

Family	%
white	64.5
yellow	12.4
yellow-green	9.8
red-violet	8.2
gray	3.1
blue-violet	2.0
yellow-orange	0.3
orange	0.3
green	0.3

Accent Colors:

Hex	Family	Name	Chroma
6E6650	yellow-orange	dimgray	14.0
D48E6A	orange	darksalmon	37.2
6F8F83	green	blue gray	14.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.169
Mean Local Roughness	0.011
Roughness Uniformity	0.015
Edge Density	0.036
Mean Gradient Magnitude	0.092
Gradient Variance	0.026
Gradient Smoothness	0.0
Directional Coherence	0.051
Pattern Complexity	0.112
Pattern Repetition	1.0
Detail Frequency Ratio	0.601
Spatial Variation	0.092
Texture Consistency	0.36

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.723
Brightness Variance	0.169
Brightness Uniformity	0.766
Brightness Skewness	-2.044
Brightness Entropy	6.284
Rms Contrast	0.169
Michelson Contrast	1.0
Weber Contrast	0.498
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.553
Shadow Percentage	6.835
Midtone Percentage	13.295
Highlight Percentage	79.869
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.015
Coarse Contrast	0.025
Multiscale Contrast Ratio	0.236
Edge Contrast	0.092
Contrast Clustering	0.64

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.747
Color Clustering	0.758
Color Transition Smoothness	0.764
Transition Uniformity	0.823
Sharp Transition Ratio	0.1
Transition Directionality	0.067
Mean Saturation	0.136
Saturation Variance	0.023
Low Saturation Ratio	0.74
Medium Saturation Ratio	0.26
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.531
Complementary Balance	0.077
Analogous Dominance	0.708
Temperature Bias	0.413

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). Ab Minor - Research on Harmony - Variation 6 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0847.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/ab-minor-research-on-harmony-variation-6_9dm.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)

3e1832acb1b9997d65221b7f03680def21ff794106d813d02fd97bd86955d-dee

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20250125-0043
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