AQC0624

Nanopublication — Computational Image Analysis - AQC0624

by Arnaud Quercy · C# minor - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0624

> Computational image analysis [3] of artwork C# minor - Research [1] on Harmony - Variation 1 (AQC0624) [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]: 2277x3415 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		456784	20.3	blue-violet	grayish purple
2		EEB92A	18.9	yellow-orange	goldenrod
3		30536B	12.9	blue	grayish purple
4		83BFA9	11.2	green	darkseagreen
5		4B6654	9.0	yellow-green	darkslategray
6		190F09	8.1	orange	black
7		628699	8.0	blue	blue gray
8		33281D	6.3	orange	very dark gray
9		E7CDB3	3.4	orange	wheat
10		B5A87C	1.9	yellow-orange	ochre
11		F9F0D4	0.3	yellow	antiquewhite [Accent]

Color Families:

Family	%
blue	20.9
yellow-orange	20.8
blue-violet	20.3
orange	17.8
green	11.2
yellow-green	9.0
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
F9F0D4	yellow	antiquewhite	15.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.22
Mean Local Roughness	0.024
Roughness Uniformity	0.028
Edge Density	0.119
Mean Gradient Magnitude	0.194
Gradient Variance	0.082
Gradient Smoothness	0.0
Directional Coherence	0.046
Pattern Complexity	0.125
Pattern Repetition	1.0
Detail Frequency Ratio	0.636
Spatial Variation	0.124
Texture Consistency	0.482

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.457
Brightness Variance	0.22
Brightness Uniformity	0.518
Brightness Skewness	-0.019
Brightness Entropy	7.217
Rms Contrast	0.22
Michelson Contrast	1.0
Weber Contrast	0.806
Mean Local Contrast	0.026
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.671
Shadow Percentage	28.4
Midtone Percentage	40.978
Highlight Percentage	30.622
Shadow Clipping	0.016
Highlight Clipping	0.007
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.033
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.194
Contrast Clustering	0.518

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.753
Color Clustering	0.659

Metric	Value
Color Transition Smoothness	0.482
Transition Uniformity	0.438
Sharp Transition Ratio	0.1
Transition Directionality	0.058
Mean Saturation	0.51
Saturation Variance	0.041
Low Saturation Ratio	0.135
Medium Saturation Ratio	0.645
High Saturation Ratio	0.22
Saturation Clustering	0.998
Hue Concentration	0.265
Complementary Balance	0.172
Analogous Dominance	0.605
Temperature Bias	-0.239

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). C# minor - Research on Harmony - Variation 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0624.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/c-minor-research-on-harmony-variation-1_6yw.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)

3f1d4778f7b828814cafc3277c16753df386650bde70b-d52a3c471203c49b52a

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240615-0120
Asset code	AQC0624
Version	1
Published	2026-03-25

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-03-27

Persistent URI: https://multimodal.institute/en/nanopubs/2026/03/AQC0624-computational-image-analysis-aqc0624.pdf