AQC0721 | NAN-COL000233

Nanopublication — Computational Image Analysis - AQC0721

by Arnaud Quercy · C Minor - Research on Harmony - Variation 6 · 2024

CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0721

K-means clustering (10 colors) performed on artwork C Minor - Research on Harmony - Variation 6 (AQC0721) [1] by Arnaud Quercy [2] on 2025-10-03, according to IDS-CMP-2025 [3]. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

CONTEXT

Analysis performed according to IDS-CMP-2025 [3] includes four metric categories: (a) Color distribution via k-means (10 colors), (b) Texture analysis using Haralick features, (c) Brightness and contrast measurements, (d) Spatial pattern characterization. Source image: 3024x4032 pixels. Analysis date: 2025-10-03.

A) COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		6E497D	18.2	red-violet	dusty mauve
2		886595	16.2	red-violet	dusty mauve
3		D9294B	14.1	red-orange	crimson
4		E54467	11.7	red	indianred
5		A78BD2	11.2	violet	mediumpurple
6		2C2A35	9.8	violet	very dark gray
7		886CBA	6.9	violet	slateblue
8		44485B	6.7	blue-violet	grayish purple
9		E4D4C9	2.9	orange	lightgray
10		B6752A	2.4	orange	chocolate

Color Families:

Family	%
red-violet	34.3
violet	27.9
red-orange	14.1
red	11.7
blue-violet	6.7
orange	5.3

B) TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.141
Mean Local Roughness	0.012
Roughness Uniformity	0.017
Edge Density	0.039
Mean Gradient Magnitude	0.102
Gradient Variance	0.032
Gradient Smoothness	0.0
Directional Coherence	0.05
Pattern Complexity	0.12
Pattern Repetition	1.0
Detail Frequency Ratio	0.631
Spatial Variation	0.1
Texture Consistency	0.372

C) BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.424
Brightness Variance	0.141
Brightness Uniformity	0.668
Brightness Skewness	0.406
Brightness Entropy	6.975
Rms Contrast	0.141
Michelson Contrast	1.0
Weber Contrast	0.614
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.467
Shadow Percentage	21.868
Midtone Percentage	74.51
Highlight Percentage	3.623
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.017
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.102
Contrast Clustering	0.628

D) SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.795
Color Clustering	0.353
Color Transition Smoothness	0.733
Transition Uniformity	0.775
Sharp Transition Ratio	0.1
Transition Directionality	0.063
Mean Saturation	0.46
Saturation Variance	0.046
Low Saturation Ratio	0.206
Medium Saturation Ratio	0.563
High Saturation Ratio	0.231
Saturation Clustering	1.0
Hue Concentration	0.729
Complementary Balance	0.004
Analogous Dominance	0.638
Temperature Bias	0.206

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 Ideamorphic Studies' computational imaging systems.

REFERENCES

[1] Quercy, A. (2024). C Minor - Research on Harmony - Variation 6 - Catalogue Raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0721.html

[2] Quercy, A. (2025). ORCID https://orcid.org/0009-0000-2662-7790

[3] Quercy, A. (2026). Computational Image Analysis Standard. https://ideamorphism.org/en/measurements/2025/09/ids-cmp-2025-computational-image-analysis-standard-5dq9.html

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

e9939975fc0dd147221fe7c405e174a7562f9381e527585267cb82715d49ee7c

Artist	Arnaud Quercy
Date	2024
Collection	Harmonic Crossing
Certificate	20241201-0217

Asset code	AQC0721
Identifier	NAN-COL000233
Version	1
Published	2025-10-03

ISSN: applied for — U.S. ISSN Center, Library of Congress

Published by Art Quam Anima Publishing New York,
an assumed name of AQA Publishing LLC

c/o Northwest Registered Agent, 418 Broadway Ste N
Albany, NY 12207, USA
+1 917-764-5470

NY DOS ID 7624376 · Assumed Name ID 7658709

publishing.artquamanima.com

Last updated: 2026-09-15

Persistent URI: https://ideamorphism.org/en/nanopubs/2025/10/AQC0721-computational-image-analysis-aqc0721.pdf