

Nanopublication — Computational Image Analysis - AQC0822

by Arnaud Quercy · D Major - Research on Harmony - Variation 12 · 2025

Claim 1: Computational Image Analysis - AQC0822

Computational image analysis [3] of artwork D Major [1] - Research on Harmony - Variation 12 (AQC0822) [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]: 2513x3350 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D5CDC4	20.2	yellow-orange	lightgray
2	86A391	17.2	yellow-green	darkseagreen
3	96B5A4	16.8	yellow-green	steel gray
4	DED7CF	15.1	yellow-orange	lightgrey
5	A9C8B8	10.8	yellow-green	silver
6	728F7C	8.0	yellow-green	gray
7	7C7019	5.4	yellow	olive
8	998937	2.8	yellow	olivedrab
9	191E19	2.7	gray	very dark gray
10	434F44	1.2	yellow-green	darkslategray
11	E6B69F	0.3	orange	burlywood [Accent]
12	CFA398	0.3	red-orange	tan [Accent]

Color Families:

Family	%
yellow-green	53.9
yellow-orange	35.2
yellow	8.2
gray	2.7
orange	0.3
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
E6B69F	orange	burlywood	22.8
CFA398	red-orange	tan	19.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.165
Mean Local Roughness	0.017
Roughness Uniformity	0.017
Edge Density	0.093
Mean Gradient Magnitude	0.149
Gradient Variance	0.04
Gradient Smoothness	0.0
Directional Coherence	0.032
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.615
Spatial Variation	0.102
Texture Consistency	0.69

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.672
Brightness Variance	0.165
Brightness Uniformity	0.755
Brightness Skewness	-1.246
Brightness Entropy	6.971
Rms Contrast	0.165
Michelson Contrast	1.0
Weber Contrast	0.439
Mean Local Contrast	0.019
Contrast Uniformity	0.043
Dynamic Range	1.0
Effective Dynamic Range	0.467
Shadow Percentage	3.75
Midtone Percentage	40.892
Highlight Percentage	55.358
Shadow Clipping	0.003
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.024
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.149
Contrast Clustering	0.31

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.716
Color Clustering	0.784

Metric	Value
Color Transition Smoothness	0.628
Transition Uniformity	0.732
Sharp Transition Ratio	0.1
Transition Directionality	0.038
Mean Saturation	0.195
Saturation Variance	0.034
Low Saturation Ratio	0.894
Medium Saturation Ratio	0.05
High Saturation Ratio	0.056
Saturation Clustering	1.0
Hue Concentration	0.703
Complementary Balance	0.005
Analogous Dominance	0.695
Temperature Bias	-0.462

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). D Major - Research on Harmony - Variation 12 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0822.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/d-major-research-on-harmony-variation-12_93w.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <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)

e2b9a4080d8aabaac35f8ff1e6120f1e7d1c13c4c768749359c771fcd5a8c960

Artist Arnaud Quercy

Date 2025

Collection Synesthetic Explorations

Certificate 20250125-0018

Asset code AQC0822

Version 1

Published 2026-04-09

© 2026 Multimodal Institute

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

Date of publication: 2026-04-09

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0822-computational-image-analysis-aqc0822.pdf>

Content available under Creative Commons Attribution-NonCommercial 4.0 License (CC BY-NC 4.0)